

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Duke Zinser	§
Patent No.:	7,583,191	§ REQUEST FOR <i>EX PARTE</i>
		§ REEXAMINATION
		§
Issued:	September 1, 2009	§
		§
For:	Security system and method for	§
	use of same	§

EX PARTE REEXAMINATION

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF EFS-WEB FILING

Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on June 19, 2024.

/Kirby Drake/
Kirby Drake

REQUEST FOR *EX PARTE* REEXAMINATION OF U.S. PATENT NO. 7,583,191

Patent Owner/Assignee respectfully requests *ex parte* reexamination of U.S. Patent No. 7,583,191 (“the ’191 Patent”) pursuant to 35 U.S.C. §§ 302-307 and 37 C.F.R. § 1.510. The ’191 Patent entitled “Security system and method for use of same” issued on September 1, 2009 and was filed on November 14, 2006 (Exhibit A). The ’191 Patent is still enforceable.

I. Identification of Claims Needing Reexamination

Patent Owner/Assignee requests that claims 1-20 be reexamined.

II. Particular Statements Regarding Each Substantial New Question of Patentability

Pursuant to 35 U.S.C. § 303 and 37 C.F.R. § 1.510, the following prior art references raise a substantial new question of patentability concerning the claims of the ’191 Patent:

- U.S. Patent No. 5,428,388 (hereinafter *Von Bauer*) (Exhibit B)
- U.S. Patent Application Publication No. 2004/0080615 (hereinafter *Klein*) (Exhibit C)
- WO 01/93220 (hereinafter *Menard*) (Exhibit D)

In particular, pursuant to 37 U.S.C. § 1.510(b)(1), Patent Owner/Assignee submits the following statement pointing out the substantial new questions of patentability (“SNQP”):

- SNQP 1: Claims 1-7 and 19-20 are obvious over *Von Bauer* in combination with *Menard*.
- SNQP 2: Claims 8-18 are obvious over *Von Bauer* in combination with *Menard* and *Klein*.

No reference listed above was applied to reject claims, either alone or in combination, during the original prosecution of the ’191 Patent.

In the Sections that follow, Patent Owner/Assignee provides summaries of the invention and the prosecution history of the ’191 Patent, a discussion of the scope and content of the prior art, and a detailed explanation of the relevance and manner of applying the prior art to every independent claim for which reexamination is requested.

III. The Invention of the ’191 Patent

The ’191 Patent describes a doorbell monitoring system and a method for doorbell monitoring wherein a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker (*see, e.g.*, Figure 1; Abstract; 2:22-24). An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone (*see, e.g.*, Figure 1; Abstract; 2:24-34). When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external

microphone to the individual's cellular telephone (*see, e.g.*, Figure 1; Abstract; 2:35-52). Similarly, the control unit relays audio data from the owner to the person at the entry point (*see, e.g.*, Figure 1; Abstract; 2:45-52).

IV. Prosecution History of the '191 Patent (Exhibit E)

The application was filed on November 14, 2006, and assigned U.S. Patent Application No. 11/559,808. A non-final rejection was mailed on November 26, 2008, rejecting claims 1-20. More specifically, claims 1-20 were rejected as being anticipated by U.S. Patent No. 6,778,084 to Chang (hereinafter *Chang*). The applicant filed a response on February 25, 2009, arguing that in *Chang*, the presence of an intruder is detected by actuation of an intrusion device rather than ringing of a doorbell. Further, *Chang* does not work in connection with an everyday, non-emergency event, triggered by a visitor ringing the doorbell. Rather, *Chang* works with emergency, alarm events. The applicant also amended the claims to direct them to a doorbell monitoring system and method rather than a security system and method, adding in limitations reflecting use of a doorbell. A notice of allowance was mailed on May 5, 2009.

V. Scope and Content of the Prior Art

U.S. Patent No. 5,428,388 (hereinafter *von Bauer*) (Exhibit B) is entitled "Video Doorbell System." It was filed June 15, 1992 and issued June 27, 1995, making it prior art. *von Bauer* is directed to a communication apparatus for monitoring sounds and images at a remote location, the apparatus including a monitor station located within the building and a sensor station located at the entranceway.

U.S. Patent Application Publication No. 2004/0080615 (hereinafter *Klein*) (Exhibit C) is entitled "Digital video security system." It was filed August 21, 2003 and published April 29, 2004, making it prior art. *Klein* describes a video module for rendering video images captured

by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.

WO 01/93220 (hereinafter *Menard*) (Exhibit D) is entitled “Modular communication and control system and method.” It was filed May 26, 2000 and published December 6, 2001, making it prior art. *Menard* is directed to a system and method for detecting and monitoring at least one event or condition of interest. The system comprises a sensor and a wireless transmitter and receiver. Upon detection of an event of interest, the sensor communicates that information to the transmitter for communication to the receiver. A module with a sensor can indicate the position of a door coupled to a door opener. A door position sensor coupled to the module provides information to the user over a wireless communication channel.

VI. Detailed Explanation of Manner of Applying Prior Art

SNQP 1: Claims 1-7 and 19-20 are obvious over *Von Bauer* in combination with *Menard*.

The combination of *Von Bauer* with *Menard* renders claims 1-7 and 19-20 obvious. Attached as Exhibit F is a chart showing where each limitation of independent claims 1 and 19 may be found in the combination of *Von Bauer* and *Menard*. Claims 2-7 and 20 depend directly or indirectly from independent claims 1 and 19 and inherit all features and limitations of the base claim from which they depend. Accordingly, claims 2-7 and 20 are invalid for at least the reasons as set forth with respect to claims 1 and 19.

SNQP 2: Claims 8-18 are obvious over *Von Bauer* in combination with *Menard* and *Klein*.

Attached as Exhibit F is a chart showing where each limitation of independent claims 8

and 14 may be found in *Von Bauer* in view of *Menard* and *Klein*. Claims 9-13 and 15-18 depend directly or indirectly from independent claims 8 and 14 and inherit all features and limitations of the base claim from which they depend. Accordingly, claims 9-13 and 15-18 are invalid for at least the reasons as set forth with respect to claims 8 and 14.

VII. Conclusion

In view of the foregoing, claims 1-20 of the '191 Patent should be reexamined based on the substantial new question of patentability presented in this Request.

Respectfully submitted,

Date: June 19, 2024

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UNITED STATES
PATENT AND TRADEMARK OFFICE

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APPLICATION #
90/019,542

RECEIPT DATE / TIME
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Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 66033826

FILING DATE -

CUSTOMER # 31814

FIRST NAMED INVENTOR Duke W. Zinser

CORRESPONDENCE ADDRESS -

AUTHORIZED BY -

Documents

TOTAL DOCUMENTS: 10

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Request_Zinser.pdf	5	Receipt of Original Ex Parte Reexam fewer than 40 Pages Rule 1.20(C)(1)	130 KB
Exhibit_A_US7583191.pdf	9	Copy of patent for which reexamination is requested	1109 KB
Exhibit_B_US5428388.pdf	25	Other reference- Patent/Application/Search Documents	2114 KB
Exhibit_C_US20040080615A 1.pdf	10	Other reference- Patent/Application/Search Documents	904 KB

Exhibit_D_WO2001093220A1.pdf	93	Foreign Reference	3794 KB
Exhibit_E_PH.pdf	110	Other reference- Patent/Application/Search Documents	3459 KB
Exhibit_F_Zinser_ReExam_Charts.pdf	13	Receipt of Original Ex Parte Reexam fewer than 40 Pages Rule 1.20(C)(1)	137 KB
aia0081b.pdf	3	Power of Attorney	600 KB
sb0057.pdf	4	Reexam Miscellaneous Incoming Letter	488 KB
IDS_June2024.pdf	4	Information Disclosure Statement (IDS) Form (SB08)	1313 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Request_Zinser.pdf	B120E36DF50496EBE74D84DB2789FAD173D18174D5D0822CF9706DCF7CAB780BE876CFBBDD7D830E868908C5E86D2FFC62BA5081A5C0172C35F6A58C58812A69
Exhibit_A_US7583191.pdf	9EC0913576B4C1402B6B1CCAA9DD0D1D855B5DC3199306E7F0F0A09E29048EFB07458675772EC3C89EA525F1FE8890D13EB6E432EDBC92BBCF1C3AEEE8586965
Exhibit_B_US5428388.pdf	5DA44F105FB2035765D7BD3C38E6CFB4950F8C89E24B64420AC22839BE1CABEB68FFBC564C08A1D841539DD322BADF8B397578403897AC470982F2177B4C9742
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Exhibit_D_WO2001093220A1.pdf	0A599FF1343C1DE781F5291853C7E498EAD5B9E7EAD4111C35643F9133D155400BE7CF9998627E1BE66D330D1E7DD065802F0458B2917139340547DB798E09B2
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Exhibit_F_Zinser_ReExam_Charts.pdf	C7222CA6ED53AADC0D3C6128EA8149A9937B2835BA9F41D1E57B66E716C126B40A3FEAA8AC47D80209D2F703C5593EDC9CD275938498079971940912DA1DD612
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If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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Filing Date(s)	
First Named Inventor	
Title	
Patent Number	
Examiner Name	
Attorney Docket No(s)	

I. Power of Attorney. This form may be used to change the Power of Attorney in a reexamination or supplemental examination proceeding (or multiple proceedings where merged). This form may also be used to change the Power of Attorney in the patent file; in such a case, a copy of this form will be placed in both the patent file and the reexamination or supplemental examination proceeding.

A. Revocation of Previous Power of Attorney. I hereby revoke all previous patent owner powers of attorney, if any, given:

☐ in the above-identified reexamination or supplemental examination proceeding control number(s) (more than one may be changed only if the proceedings are merged).

☐ in the file of the above-identified patent.

(check BOTH boxes if change in BOTH the patent file and the reexamination or supplemental examination proceeding is requested).

B. Designation of Power of Attorney.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the Customer Number identified in the box at right as my/our attorney(s) or agent(s) to prosecute the proceeding(s)/patent identified above and selected in section I(A), and to transact all business in the United States Patent and Trademark Office connected therewith:

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OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the proceeding(s) identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Authorization for the Power of Attorney is provided by the signature on page 2 of this form.

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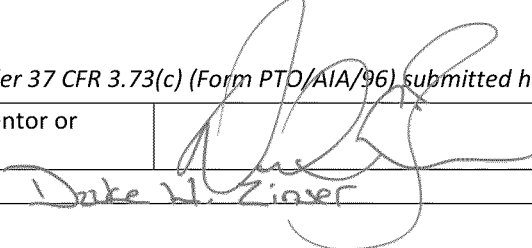
III. Authorization for Power of Attorney and (if selected) Change of Correspondence Address

I am the:

☒ Inventor, having ownership of the patent being reexamined.
OR

☒ Patent owner.

Statement under 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herewith or filed on _____.

Signature of Inventor or Patent Owner		Date	5.29.24
Name	Duke W. Zinser	Telephone	972.467.4873
Title and Company			

NOTE: Signatures of all the inventors or patent owners of the entire interest or their representative(s) are required. If more than one signature is required, submit multiple forms, check the box below, and identify the total number of forms submitted in the blank below.

☒ A total of _____ forms are submitted. *If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013). <https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf>

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REQUEST FOR *EX PARTE* REEXAMINATION TRANSMITTAL FORMAddress to:
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P.O. Box 1450
Alexandria, VA 22313-1450

Attorney Docket No.: _____

Date: June 19, 2024

1. ☒ This is a request for *ex parte* reexamination pursuant to 37 CFR 1.510 of patent number 7,583,191 issued September 1, 2009. The request is made by:
☒ patent owner. ☐ third party requester.
2. ☒ The name and address of the person requesting reexamination is:
Duke Zinser
709 N. Glenville Drive Suite 200
Richardson, Texas 75081
3. Requester ☒ asserts small entity status (37 CFR 1.27) or ☐ certifies micro entity status (37 CFR 1.29). Only a patent owner requester can certify micro entity status. Form PTO/SB/15A or B must be attached to certify micro entity status.
4. This request is accompanied by payment of the reexamination fee as set forth in:
☐ 37 CFR 1.20(c)(2); or
☒ 37 CFR 1.20(c)(1). **In checking this box for payment of the fee set forth in 37 CFR 1.20(c)(1), requester asserts that this request has forty (40) or fewer pages and complies with all other requirements of 37 CFR 1.20(c)(1).**
- Payment of the reexamination fee is made by the method set forth below.
- a. ☐ A check in the amount of \$_____ is enclosed to cover the reexamination fee;
- b. ☐ The Director is hereby authorized to charge the reexamination fee
to Deposit Account No. _____;
- c. ☐ Payment by credit card. Form PTO-2038 is attached; or
- d. ☒ Payment made via USPTO patent electronic filing system.
- ☐ In addition, the Director is hereby authorized to charge any fee deficiencies to
Deposit Account No. _____.
5. ☐ Any refund should be made by ☐ check or ☐ credit to Deposit Account No._____.
37 CFR 1.26(c). If payment is made by credit card, refund must be to credit card account.
6. ☒ A copy of the patent to be reexamined having a double column format on one side of a separate paper is enclosed. 37 CFR 1.510(b)(4).
7. ☐ CD-ROM or CD-R in duplicate, Computer Program (Appendix) or large table
☐ Landscape Table on CD

[Page 1 of 3]

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0064. Public burden for this form is estimated to average 18 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. If filing this completed form by mail, send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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8. ☐ Nucleotide and/or Amino Acid Sequence Submission
If applicable, items a. – c. are required.
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM (2 copies) or CD-R (2 copies) **or**
- ii. ☐ paper
- c. ☐ Statements verifying identity of above copies.
9. ☒ A copy of any disclaimer, certificate of correction or reexamination certificate issued in the patent is included.
10. ☒ Reexamination of claim(s) 1-20 is requested.
11. ☒ A copy of every patent or printed publication relied upon is submitted herewith including a listing thereof on Form PTO/SB/08, PTO-1449, or equivalent.
12. ☐ An English language translation of all necessary and pertinent non-English language patents and/or printed publications is attached.
13. ☒ The attached detailed request includes at least the following items:
- a. A statement identifying each substantial new question of patentability based on prior patents and printed publications. 37 CFR 1.510(b)(1).
- b. An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited art to every claim for which reexamination is requested. 37 CFR 1.510(b)(2).
14. ☐ A proposed amendment is included (only where the patent owner is the requester). 37 CFR 1.510(e).
15. ☒ It is certified that the statutory estoppel provisions of 35 U.S.C. 315(e)(1) or 35 U.S.C. 325(e)(1) do not prohibit requester from filing this *ex parte* reexamination request. 37 CFR 1.510(b)(6).
16. Service
- a. ☐ It is certified that a copy of this request (if filed by other than the patent owner) has been served in its entirety on the patent owner as provided in 37 CFR 1.33(c).
- The name and address of the party served are:
- _____
- _____
- _____
- Date of Service: _____
- OR**
- b. ☐ A duplicate copy is enclosed since service on patent owner was not possible. An explanation of the efforts made to serve patent owner **is attached**. See MPEP 2220.

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18. ☐ The patent is currently the subject of the following concurrent proceeding(s):

a. Copending reissue Application No. _____



b. Copending reexamination Control No. _____



c. Copending Interference No. _____

d. Copending litigation styled: _____

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/Kirby Drake/

Authorized Signature

June 19, 2024

Date

Kirby Drake

Typed/Printed Name

55126

Registration No.



For Patent Owner Requester



For Third Party Requester

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- 3) a contractor of the USPTO having need for the information in order to perform a contract;
- 4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record;
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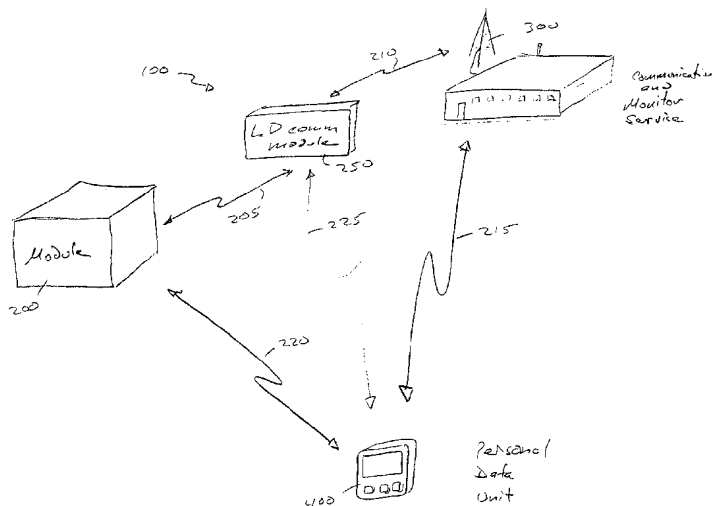
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(54) Title: MODULAR COMMUNICATION AND CONTROL SYSTEM AND METHOD



(57) Abstract: A system and method for detecting and monitoring at least one event or condition of interest. The system comprises a sensor and a wireless transmitter and receiver (150). Upon detection of an event of interest, the sensor communicates that information to the transmitter for communication to the receiver. A module with a sensor to indicate the position of a door coupled to a door opener. The module (200) is compatible with a wireless communication protocol and operates over both a long range, such as is used with a cellular telephone, and a short range, such as is used with BLUETOOTH. A door position sensor coupled to the module (200) provides information to the user over a wireless communication channel. In one embodiment, information from an additional door position sensor is wirelessly transmitted. In one embodiment, an audio transducer coupled to the module responds to voice commands to operate the door opener.

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MODULAR COMMUNICATION AND CONTROL SYSTEM AND METHOD

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Field of the Invention

The present subject matter relates generally to communication and control systems, and in particular, to a wireless, modular, system suitable for a variety of applications, including building maintenance and control, premises security and personal safety.

Background of the Invention

The variety of separate networks that may exist in a single building creates numerous problems for those purchasing, operating, and maintaining those networks. One example of a typical network is a security system. Another network is a building management or environmental control system. Each of these networks operates using separate controllers, separate network elements, and separate power supplies. With few exceptions, the intranetwork communications of one system are not compatible with those of another system. In addition, the design and installation of such systems are usually proprietary and thus, components from one manufacturer are not compatible with those of another manufacturer. Furthermore, the bandwidth requirements for the communications within each type of network are varied. For example, a security system may require a bandwidth of approximately 1kbit/second, whereas a building management system may require 100kbit/second.

What is needed in the art is improved technology that enables portable, modular, bidirectional communication between a wide variety of devices and that satisfies the demand for a security systems and automated building controls.

Furthermore, what is needed in the art is a system enabling both safety and convenience features in an affordable, modular, arrangement that is easy to install and manage.

In addition, and for reasons of convenience and safety, many overhead garage doors are equipped with an electric door opener. Automobile drivers find it convenient to remotely open and close the overhead door without exiting their car. Homeowners also enjoy the convenience of opening the garage door with a
5 push of a button. Often, a control button is wired directly to the opener and located on an interior surface of a garage wall. Homeowners also find that a properly installed electric garage door opener improves personal safety. Most doors are heavy and, unless operated with appropriate care, can be lethal if dropped on a child. Safety features of modern garage doors, including automatic
10 reverse on obstruction and floor level optical sensors, provide some measure of protection against crushing a person.

However the typical garage door opener suffers from a number of problems. First, garage door openers lack any feedback to indicate the position of the door to the user. Unless the user observes complete closure of the door,
15 there remains the possibility that the door will return to an open position after the user has driven out of view. For example, if a cat runs out of the garage moments before complete closure or if a broom handle falls in the path of the door, the opener will return the door to an open position. An unattended home with an open garage door is an easy target for a burglar. Second, in most cases,
20 the user must use either the proprietary remote control encoded for use with the particular opener or the wired button usually affixed to a wall surface. If the remote control is unavailable, then the user is inconvenienced and forced to use other means to open the door. For example, without a remote control, the user may have to enter the garage using an alternate door or use an external switch.
25 Third, typical garage door openers lack adequate security protection to prevent operation of the door by an unauthorized person. For example, in some cases, the wireless garage door opener access code can be stolen by a third party using code grabbing devices. Using such a device, a thief waiting near the home can copy the wireless access code and later return to burglarize the garage, and in
30 some cases, the home.

A profile schematic of a residential garage door opener system 1000 is illustrated in Figure 30. In the figure, power unit 1500 may include an electric

motor that provides the force to open and close the garage door. Power unit 1500 may include a belt drive, a chain drive, gear train or other power transmission means to convert rotational forces to linear motion. In the typical installation, power unit 1500 is anchored securely to rafters or other ceiling structure in the garage by supporting structure 5500, which may include angle iron or other stock.

Trolley mechanism 2500 travels along track 2000 in the directions shown generally by arrow 5000. Track 2000 is attached at one end to power unit 1500 and attached at the other end to the garage structure at bracket 4500. Actuator arm 3000 is flexibly coupled to trolley 2500 on one end and flexibly coupled to garage door 4000 by bracket 3500. Door 4000 may be fabricated of wood, aluminum, steel, fiberglass or any other material and often includes multiple door panels, each of which is commonly referred to as a section, arranged in a hinged assembly. A section of door is illustrated in Figure 30. The edge of each section of garage door 4000 includes rollers. The rollers engage door tracks mounted along the sides of the door opening.

Switch 6500 is wired directly to power unit 1500 by line 7000. Switch 6500 is often mounted on a wall adjacent to a service door to the garage. Normally, when the button on switch 6500 is pressed, power unit 1500 drives door 4000 to an open position if door 4000 closed, and to a closed position if open. Electrical power to operate in this manner is drawn from line cord 6000 which is typically plugged into a nearby outlet mounted in the ceiling of the garage.

In addition to switch 6500, power unit 1500 can be operated by using remote control 8500. Control 8500 includes a wireless transmitter that broadcasts a signal to power unit 1500 by radio link 8000. In the figure, antenna 7500 is mounted on power unit 1500, however, an antenna may, instead, be located on switch 6500. Control 8500 is most often used by a driver from within an automobile. Control 8500, like switch 6500, causes power unit 1500 to drive door 4000 to an open position if closed, and to a closed position if door 4000 is open.

For the reasons stated above, and for other reasons stated below which will become apparent to those skilled in the art upon reading and understanding the present specification, there is a need in the art for systems and methods to control and manage a door opener system or other device using a controller
5 having an unlimited geographical range, interoperability with other systems, simple programming to enable easy set-up and configuration of the remote control system, and feedback indicating status or mode of operation of the opener or other device.

Summary

10 The present subject matter provides a system and method to address the aforementioned problems. In one embodiment, the present subject matter provides a security sensor and a wireless transceiver communicating using a network protocol. In one embodiment, the transceiver also retransmits communications using the network protocol. In various embodiments, the
15 transceiver is compatible with an IEEE specification, BLUETOOTH® technical specification 1.0. The sensor may include, but is not limited to, a motion sensor, a passive infrared motion detector, pressure sensor, position sensor, proximity sensor, glass breakage sensor or a video camera. Environmental sensors are also contemplated, either individually or in combination with other sensors.
20 Environmental sensors may include, but are not limited to, a temperature sensor, a gas sensor, a particulate sensor, a fluid sensor, or a sound sensor. The system may also include a control, such as, but not limited to a power control, an appliance control, an air conditioner control, a furnace control, or a ventilation control. The system may also include a an operable security device coupled to
25 the wireless transceiver. Such devices may include, but are not limited to, a lock or a siren. In one embodiment, other wireless transceivers are comprehended and enable relaying of communications. In one embodiment, the wireless transceiver communicates with a long range, bidirectional wireless network, such as, but not limited to, a telephone, a cellular telephone, a pager, a computer,
30 a personal communication service (PCS) device, a narrowband PCS device, a two-way pager, a personal data assistant. The system may be battery powered or powered by metered electric service.

In one embodiment, the system includes a security device, and a first wireless transceiver electrically coupled to the security device, wherein the first wireless transceiver monitors a plurality of radio frequencies, retransmits digital data in a digital network protocol, receives outbound data from the security device and wirelessly transmits the outbound data using the digital network protocol. Furthermore, the transceiver may be adapted for wirelessly receiving incoming digital data in the network protocol and communicating the incoming digital data to the security device. One embodiment includes a second wireless transceiver in communication with the first wireless transceiver, the second wireless transceiver adapted for monitoring the plurality of radio frequencies, receiving and retransmitting digital data in the digital network protocol, communicating outgoing data to a user, and transmitting the incoming digital data. In one embodiment, the transceiver is a spread spectrum transceiver. Either transceiver may be compatible with standards under IEEE 802.15, or compatible with BLUETOOTH® technical specification version 1.0. In one embodiment, the second wireless transceiver is electrically coupled to a user controllable communication device. In one embodiment, the user controllable communication device is in communication with a user. In various embodiments, the second wireless transceiver is coupled to a telephone line, a long range transceiver, a cellular communication network, or a narrowband personal communication system network. In one embodiment, the system is coupled to a modem or a packetized communication network, such as the Internet. Various portions of the system may be battery powered or line voltage powered.

In one embodiment, the system includes a first module and a second module. The first module may include a microprocessor controller, a lock coupled to the controller, an audio transducer coupled to the controller, the audio transducer for generating an electrical signal in response to received audio and for generating audio in response to a received electrical signal, a caller accessible identification module coupled to the controller, the caller accessible identification module for receiving caller entered information, a proximity detector coupled to the controller, the proximity detector for signaling the

presence of a caller near the exterior module; and a first wireless transceiver coupled to the controller, the first wireless transceiver transmitting a digital signal received from the controller, the first wireless transceiver monitoring a radio frequency for an incoming digital message in a network protocol and for communicating digital data in the network protocol upon receiving an incoming digital message. The second module may include a second wireless transceiver in wireless communication with the first wireless transceiver, the second wireless transceiver monitoring a radio frequency for an incoming digital message in a network protocol and for communicating digital data in the network protocol upon receiving an incoming digital message and a user accessible control panel electrically coupled to the second wireless transceiver. In one embodiment, the audio transducer comprises a speaker and a microphone. In one embodiment, the first module includes a video camera and the second module includes a video display. In one embodiment, the proximity detector comprises a doorbell button or a video camera. In one embodiment, the user accessible identification module includes a keypad, a biometrics sensor, or a card reader.

In one embodiment, the system comprises a clock and a transceiver coupled to the clock and a first control accessible to the user and coupled to the transceiver, wherein actuation of the first control effectuates one of a plurality of user selectable outputs, the user selectable outputs each coupled wirelessly to the device, and a second control accessible to the user, wherein actuation of the second control selects a time for activating the one of a plurality of user selectable outputs. In one embodiment, the outputs activate a security system or controls an environmental control, or controls a premises control. In one embodiment, the user can select an absolute time, a time relative to a predetermined time, or a default time. In one embodiment, the transceiver communicates omnidirectionally and is adapted for ad hoc networking capability.

In one embodiment, the present subject matter describes a method including receiving a request for service from a caller using an annunciator module, transmitting the request as a digital message in a wireless, premises-

based network protocol, receiving the request at a remote location using a personal communication device, and notifying a user of the device of the received request. In one embodiment, the method includes acknowledging receipt of the signal and communicating between the module and the device. In
5 one embodiment, the method includes communicating a video image between the module and the device. In one embodiment, the method includes sending an executable command from the device, receiving the executable command at the module, and executing the instruction. In one embodiment, the method includes sending an executable command to operate a door lock.

10 In one embodiment, the method includes entering a predetermined code into a portable transmitter, transmitting the code as a digital message in a wireless, premises-based network protocol, receiving the code at a receiver coupled to an operable device, verifying authorization of the transmitted code, and operating the device. In one embodiment, the method includes unlocking a
15 door lock or operating an electric light.

In one embodiment, the method includes detecting the position of a bolt, transmitting information corresponding to the detected position using a wireless radio frequency link in a digital, premises-based network protocol, receiving the transmitted information, and operating a security system as a function of the
20 received information. In one embodiment, the method includes operating perimeter sensors when the bolt is detected in a first position and operating perimeter sensors and interior sensors when the bolt is detected in a second position. In one embodiment, the method includes operating a security system as a function of the bolt position and the detected video image.

25 In one embodiment, the method includes executing programming on a portable communication device, generating a visual display of options for controlling the security system, selecting operational parameters for the security system using the display, executing a command to implement the selected operational parameters, and transmitting the command and selected parameters
30 to the security system using a wireless radio frequency link in a digital, premises-based network protocol.

In one embodiment, a system includes a transducer for generating data upon detecting a local event, a first communication module coupled to the transducer, the first communication module including a first transceiver for wirelessly transmitting transducer data in a premises-based, digital network protocol, and a second communication module for wirelessly communicating with the first communication module, the second communication module further including a second transceiver for communicating with the first communication module using the digital network protocol, and a user operable device coupled to the second transceiver, the user operable device adapted for communicating with the transducer via the digital network protocol. In one embodiment, a controllable member is operated as a function of the user operable device.

In one embodiment, the method includes detecting a user controlled action, generating encoded data as a function of the user controlled action, transmitting the encoded data to a remote facility using a premises-based, digital network protocol, receiving the encoded data at the remote facility, and initiating an emergency response as a function of the encoded data. In one embodiment, the method includes summoning fire suppression aid, summoning police service or summoning medical aid. In one embodiment, the method includes detecting a keystroke, detecting a touch screen input or detecting an audible command. In one embodiment, the method includes generating encoded data indicative of a fire emergency, a police emergency, or a medical emergency.

In one embodiment, the system includes a passive infrared motion detector and a transmitter coupled to the detector, the transmitter is compatible with BLUETOOTH® technical specification version 1.0. In one embodiment, the system includes a receiver coupled to the detector, the receiver is compatible with BLUETOOTH® technical specification version 1.0. In one embodiment, the system includes a long range communication module, the module adapted for communicating with the detector using the transmitter and further wherein the module is coupled to a long range communication network. In one embodiment, the long range communication network is a telephone network, a cellular telephone network, a radio network, a personal communication system network, or a two-way pager network.

In addition, the above mentioned problems with door openers and other problems are addressed by the present invention and which will be understood by reading and studying the following specification. A system and method is described which allows remote control and management of single or multiple
5 door openers using a wired or wireless communication device. The device may be a cellular telephone, a pager, a personal digital assistant, a computer or other device that communicates using a network.

In particular, an illustrative embodiment of the present invention includes a processor executing programming and coupled to a door opener, a position
10 sensor, and a wireless transceiver that communicates using both a long range communication protocol and a short range communication protocol. A user need not specify the communication protocol to be used in controlling or managing the opener. The opener receives commands and transmits status information using either or both of the long range and short range protocols. In one
15 embodiment, the system detects the presence of a short range protocol device, disables long range communications, and engages in short range communications with the detected device. When the distance between the device and the door opener exceeds the effective range of the short range device, the system terminates short range communications and establishes a
20 communication link using a long range communication protocol. The communication link, whether long range or short range, provides a channel for communicating information from the door opener to the device and for communicating instructions from the device to the door opener.

Position information is transmitted to the device by a transceiver coupled
25 to the processor. Other information, such as temperature or light levels, may also be transmitted to the device.

The present subject matter provides a system and method to address the aforementioned problems and others not expressly stated in this detailed description. In one embodiment, an assisted personal communication system,
30 including a two way pager or other bidirectional, long range, communication device, is used in conjunction with a response agency to coordinate a request for assistance by a user. In one embodiment, the system is used for children to

report an emergency, or other situation, and to coordinate assistance efforts by the response agency.

These and other features and advantages of the invention will become apparent from the following description of the embodiments of the invention.

5 **Description of the Figures**

Figure 1 is a diagram showing one embodiment of the present system.

Figure 2A is a diagram showing one embodiment of the present system.

Figure 2B is a diagram showing one embodiment of the present system.

Figure 2C is a diagram showing one embodiment of the present system.

10 Figure 2D is a diagram showing one embodiment of the present system.

Figure 3A is a diagram showing the operation of one embodiment of the long distance communication module.

Figure 3B is a diagram showing the operation of one embodiment of the long distance communication module.

15 Figure 3C is a diagram showing the operation of one embodiment of the long distance communication module.

Figure 3D is a diagram showing the operation of one embodiment of the long distance communication module.

20 Figure 4 is a diagram showing various modes of communication with one embodiment of the present system.

Figure 5 is a diagram showing communication routes within one embodiment of the present system.

Figure 6A is a diagram showing one embodiment of a personal detection unit.

25 Figure 6B is a diagram showing one embodiment of a personal detection unit.

Figure 6C is a diagram showing one embodiment of a personal detection unit.

30 Figure 6D is a diagram showing one embodiment of a personal detection unit.

Figure 7 is an isometric view of an entry door with one embodiment of the present system.

- Figure 8 is a top view of an entry door with one embodiment of the present system.
- Figure 9 is an isometric view of one embodiment of the present system.
- Figure 10 is an isometric view of one embodiment of the present system.
- 5 Figure 11 is a diagram of one embodiment of the present system.
- Figure 12 is a diagram of a portion of one embodiment of the present system.
- Figure 13 is an isometric view of one embodiment of the present system.
- Figure 14 is a view of one embodiment of the present system.
- 10 Figure 15 is an isometric view of one embodiment of the present system.
- Figure 16 is an isometric view of a portion of one embodiment of the present system.
- Figure 17 is an isometric view of one embodiment of the present system.
- Figure 18 is an isometric view of one embodiment of the present system.
- 15 Figure 19 is an isometric view of one embodiment of the present system.
- Figure 20 is an isometric view of one embodiment of the present system.
- Figure 21 is an isometric view of one embodiment of the present system.
- Figure 22 is an isometric view of one embodiment of the present system.
- Figure 23 is an isometric view of one embodiment of the present system.
- 20 Figure 24 is an isometric view of one embodiment of the present system.
- Figure 25 is an isometric view of one embodiment of the present system.
- Figure 26 is an organizational chart depicting typical applications of a modular communication system.
- Figure 27 is a diagram of one embodiment of the present system with
- 25 various modes of operation.
- Figure 28 is an isometric view of a computer incorporating one embodiment of the present system.
- Figure 29 is diagram depicting representative applications of a modular communication system.
- 30 Figure 30 schematically illustrates a residential garage door opener.
- Figure 31 illustrates a block diagram of one embodiment of the present system.

Figure 32 illustrates one embodiment of a transceiver in accordance with one embodiment of the present system.

Figure 33 illustrates one embodiment of a transceiver in accordance with one embodiment of the present system.

5 Figure 34 illustrates one embodiment of a power supply in accordance with one embodiment of the present system.

Figure 35 illustrates one embodiment of a processor in accordance with one embodiment of the present system.

10 Figure 36 illustrates one embodiment of programming in accordance with one embodiment of the present system.

Figure 37 illustrates one embodiment of a method in accordance with one embodiment of the present system.

Detailed Description

15 This detailed description provides a number of different embodiments of the present system. The embodiments provided herein are not intended in an exclusive or limited sense, and variations may exist in organization, dimension, hardware, software, mechanical design and configuration without departing from the claimed invention, the scope of which is provided by the attached claims and equivalents thereof.

20 An embodiment of present system 100 is depicted in Figure 1 and includes module 200, long distance communication ("LD comm") module 250, communication and monitor service facility ("facility") 300, and personal data unit ("PDU") 400. Module 200 is in wireless communication with LD comm module 250 via link 215. LD comm module 250 is also in wireless
25 communication with facility 300 via link 210 and in wireless communication with PDU 400 via link 225. Facility 300 is in communication with PDU 400 via link 215. In addition, module 200 is in wireless communication with PDU 400 via link 220 via link 220.

30 The operation of module 200, in one embodiment, is as follows. Module 200, in response to a sensed or detected condition, generates and wirelessly transmits digital data. The condition may include an event. The digital data may correspond to the magnitude of the condition or it may indicate that the event, or

condition, occurred. Other parameters or values of digital data are also possible. The digital data transmitted by module 200 is an omnidirectional broadcast signal. In the embodiment shown in Figure 1, the signal is communicated to LD comm module 250 by wireless link 205. LD comm module 250, in turn receives the digital data, or signal, and retransmits the signal on a long range communication channel. The long range communication channel may be an omnidirectional radio broadcast, a wired network or any other type of long range communication channel. In the embodiment shown, LD comm module 250 retransmits, or rebroadcasts the signal to facility 300 via wireless radio link 210. In other embodiments, the signal is rebroadcast via a land line, a satellite link, or a combination of links and such examples are exemplary of all links contemplated herein. Figure 1 also depicts LD comm module 250 in communication with PDU 400 via link 225. LD comm module 250, and thus, link 225, may communicate using a two-way pager network, in which case, PDU 400 is a two-way pager. Alternatively, PDU 400 receives communication from facility 300 using link 215.

Having received the digital data transmitted by module 200, PDU 400 displays or renders the information in a manner useful to a person carrying PDU 400. In one embodiment, PDU 400 provides an audible signal to a user. In one embodiment, PDU 400 generates and displays graphical or textual information for the benefit of a user. In one embodiment, PDU 400 generates a tactile signal.

One embodiment of the present system allows a user carrying PDU 400 to interact with module 200 using wireless links 205, 220, or 215. Additional features and functionality of system 100 are described below.

Figure 2A, 2B, 2C and 2D provide additional view of embodiments of module 200. As shown in the figures, module 200 includes two or more components. In Figure 2A, module 200 includes device 140A coupled to transceiver 150. Transceiver 150 includes a receiver and a transmitter to enable wireless communication with device 140A. In one embodiment, device 140A generates a signal that is coupled to transceiver 150. In one embodiment, device 140A responds to signals generated by transceiver 150.

Figure 2B depicts module 200 having transceiver 150 coupled to sensor 140B. In one embodiment, sensor 140B includes a security sensor such as a motion detector, a door position sensor, or a video camera. Sensor 140B, in one embodiment, includes an environmental sensor such as a temperature probe or gas detector. Sensor 140B may be an event detection sensor or parameter detection sensor. An event may include such discrete events as unauthorized intrusion, power failure, or fire. Parameters may relate to levels of gases or fluids, temperature, rate of change of temperature or any other measurable value. Examples of sensors include a video camera, a security system door or window contact, a gas detector (such as carbon monoxide), smoke detector, or audio microphone.

In Figure 2C, module 200 includes actuator 140C coupled to transceiver 150. Actuator 140C, in one embodiment, includes a solenoid actuator. Actuator 140C may include an operable component such as a transducer or other type of electromechanical device. An actuator may include a deadbolt or solenoid-type device, actuation of which results in a mechanical change in another apparatus. A transducer may include a siren, bell or other sounding device. Other types of actuators are also comprehended, including a sounding device or a relay. In Figure 2D, module 200 includes transceiver 150 coupled to sensor and actuator 140D. Sensor and actuator 140D, in one embodiment, includes a combination of a sensor and an actuator, as herein described. In the embodiment shown, transceiver 150 communicates with both elements of sensor and actuator 140D. In other words, transceiver 150 receives and transmits sensed information as well as operating an actuator.

Transceiver 150 of module 200, in one embodiment, is a wireless transceiver utilizing BLUETOOTH® communication technology. BLUETOOTH® is a trademark registered by Telefonaktiebolaget LM Ericsson of Stockholm, Sweden and refers to short range communication technology developed by an industry consortium known as the BLUETOOTH® Special Interest Group. BLUETOOTH® operates at a frequency of approximately 2.45GHz, utilizes a frequency hopping (on a plurality of frequencies), spread spectrum scheme, and provides a digital data transfer rate of approximately

1Mb/second. In one embodiment, the present system includes a transceiver in compliance with BLUETOOTH® technical specification version 1.0, herein incorporated by reference. In one embodiment, the present system includes a transceiver in compliance with standards established, or anticipated to be established, by the Institute of Electrical and Electronics Engineers, Inc., (IEEE). The IEEE 802.15 WPAN standard is anticipated to include the technology developed by the BLUETOOTH® Special Interest Group. WPAN refers to Wireless Personal Area Networks. The IEEE 802.15 WPAN standard is expected to define a standard for wireless communications within a personal operating space (POS) which encircles a person. In one embodiment, the transceiver is a wireless, bidirectional, transceiver suitable for short range, omnidirectional communication that allows ad hoc networking of multiple transceivers for purposes of extending the effective range of communication. Ad hoc networking refers to the ability of one transceiver to automatically detect and establish a digital communication link with another transceiver. The resulting network, known as a piconet, enables each transceiver to exchange digital data with the other transceiver. According to one embodiment, BLUETOOTH® involves a wireless transceiver transmitting a digital signal and periodically monitoring a radio frequency for an incoming digital message encoded in a network protocol. The transceiver communicates digital data in the network protocol upon receiving an incoming digital message. Referring again to the figure, the wireless transceiver enables remote communication with the sensor or actuator of module 200.

In general, the effective communication range of BLUETOOTH® is relatively short, often characterized with a maximum range of approximately 10 meters. The short range capabilities of BLUETOOTH® are suitable for premises-based applications, such as data exchange within a range roughly equal to the lineal boundaries of a typical property, or premises. However, communication can be extended beyond this range by a number of different methods.

Figure 3A depicts a method for extending the range of a BLUETOOTH® device involving a long distance communication module, LD comm module 250.

In the figure, module 200 transmits a BLUETOOTH® signal, depicted as link 205, to LD comm module 250. In one embodiment, PDU 400 communicates with a wireless link 225 to LD comm module 250. In one embodiment, link 225 may include a BLUETOOTH® connection, a cellular telephone network, a
5 narrow band personal communication systems (“PCS”) network, a CELLEMETRY network, a narrow band trunk radio network or other type of bidirectional wireless communication link. Examples of PCS technology includes Code-Division Multiple Access (CDMA by Qualcomm Inc.), ReFLEX (by Motorola), Time Division Multiple Access (TDMA), Global Systems for
10 Mobile communications (GSM) or others. LD comm module 250 serves a relay function to extend the range of communications for module 200 or to extend the range of communications for PDU 400.

Figure 3B depicts LD comm module 250 coupled by link 210 to radio frequency (RF) tower 300A. RF tower 300A may provide frequency modulation
15 (FM) transmission, satellite transmission capabilities, or other wireless link capabilities. In Figure 3C, LD comm module 250 is coupled by link 210 to network 300B. Network 300B may include wired telephone service, such as plain old telephone service (“POTS”) or public switched telephone network (“PSTN”), fibre communication network, or other such network. In Figure 3D,
20 LD comm module 250 is coupled to both RF tower 300A, via link 210A, and network 300B, via link 210B. Other types of networks are also contemplated.

Figure 4 depicts various communication linkages possible using LD comm module 250. Link 225A represents a two-way pager network communicating with PDU 400, depicted herein as a pager device. Link 225B
25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone. Link 210C represents a connection to modem 300C. Modem 300C may include a dial-up modem, an asynchronous digital subscriber line (“ADSL”) modem, an integrated services digital network (“ISDN”) modem or other type of modem. Link 210D represents a telephone communication
30 network and includes telephone 300D. Link 210E represents a network connection depicted as network 300E. It will be appreciated that in Figure 4,

numerous communications linkages are depicted and in any one embodiment, one or more of the various communication linkages depicted may be utilized.

Alternative means of communicating over long distance are also contemplated. In one embodiment, the long distance network may include a
5 cellular telephone network. A user with a cellular telephone, or other cellular device, is then able to communicate with the BLUETOOTH® device as though the user was local. The long distance network may include communications using a control channel. One such example is CELLEMETRY®. CELLEMETRY® is a registered trademark of Cellemetry LLC of Atlanta,
10 Georgia, USA, and enables digital communications over a cellular telephone control channel. Other examples of communication technology are also contemplated, including MicroBurst™ technology (MicroBurst™ is a trademark of Aeris.net, Inc.) or short message service (SMS). In one embodiment, the long distance network may include a pager network. In one embodiment, the pager
15 network is a two-way pager network enabling bidirectional communication between a BLUETOOTH®-enabled sensor, or device, and a user controlled pager. In one embodiment, the long distance network includes a narrow band Personal Communication System network. In one embodiment, the long distance network may include a telephone network. The telephone network may
20 include communicating using an intranet or the Internet. Coupling to such a network may be accomplished, for example, using a variety of connections, including a leased line connection, such as a T-1, an ISDN, a DSL line, or other high speed broadband connection, or it may entail a dial-up connection using a modem. In one embodiment, the long distance network may include a radio
25 frequency or satellite communication network. In addition, one or more of the aforementioned networks may be combined to achieve desired results.

The present system also contemplates various method of control. One example of control is known as dual-tone multi-frequency (DTMF) or touch-tone control. Another example is voice-actuated control wherein the system is
30 responsive to spoken words. Other examples, or combinations, are also contemplated. For example, a system may transmit in one direction using SMS and yet receive communications in another direction using Microburst.

The BLUETOOTH® standard facilitates connectivity, and thus, range extension by coupling a plurality of BLUETOOTH®-enabled devices together. Figure 5 depicts the interconnectivity of several BLUETOOTH®-enabled devices. In this method, a wireless network is established that enables one BLUETOOTH® device to communicate with a second BLUETOOTH® device, effectively extending the range of the first device. The second device serves as a repeater, or relay, and receives and retransmits the BLUETOOTH® signal. By this method, a plurality of BLUETOOTH® devices can be daisy-chained together to achieve a desired range. For example, a single BLUETOOTH® transceiver is often described as having a short range, typically 10 meters (and up to 100 meters), and by combining a plurality of transceivers in a network, the range can be extended. Figure 5 portrays a system having modules 200A, 200B and 200C and LD comm module 250 and PDU 400. In the embodiment shown, modules 200A, 200B and 200C and LD comm module 250 are BLUETOOTH®-enabled, and thus links 202A, 202B and 202C as well as 205 are BLUETOOTH®-communication links. In one embodiment, PDU 400 is also BLUETOOTH®-enabled and thus, link 225 is a BLUETOOTH® communication link as well. In one embodiment, PDU 400 and LD comm module 250 communicate using a long range bidirectional wireless communication network.

An example of the operation of system 100 follows in which module 200A includes a motion detector sensor coupled to a transceiver. Motion detected by the sensor of module 200A is digitally encoded and transmitted by a BLUETOOTH® communication channel. In the embodiment shown, module 200C is positioned within the broadcast range of module 200A, and LD comm module 250 is positioned beyond the range of module 200A. In this case, module 200C receives the signal from module 200A and subsequently relays the digital signal to LD comm module 250. LD comm module 250, in turn, relays the digital signal, using long distance network represented herein by link 225, to PDU 400. The foregoing example describes an embodiment wherein, for example, module 200A is a first motion detector positioned at a front entry door of a residence, module 200B includes a second motion detector positioned at a

rear entry door, module 200C includes a smoke detector positioned in a central hallway, LD comm module 250 is coupled to a twisted-pair telephone network and positioned in the basement, and PDU 400 is a two-way pager device carried by a user at a remote location. In this example, the user can add modules and LD
5 comm modules without regard for the connectivity or overall system design. The self-awareness feature and networking attributes of the BLUETOOTH® technology enable simplified system development and automatically provide range extension for communication linkages.

PDU 400 is a portable communication device operable for
10 communicating digital data and having means for receiving data on a wireless link, displaying or signaling received or generated data, as well as receiving a user controlled input and transmitting data corresponding to the user controlled input. In one embodiment, PDU 400A is a two-way pager (Figure 6A). In one embodiment, PDA 400B is a cellular telephone (Figure 6B). In one
15 embodiment, PDA 400C is a personal data (or digital) assistant (Figure 6C) and is commonly referred to as a PDA. Suitable PDAs include those marketed as PalmVII by Palm Computing of Santa Clara, California, USA. In one embodiment, PDA 400D is a personal communication device (Figure 6D). PDU 400 may also be a portable computer, such as a laptop or palmtop computer (not
20 shown). Upon reading and understanding this description, one of ordinary skill in the art will recognize that PDU 400 includes a processor suitable for managing the transmission and communication functions of the present system.

It will be appreciated by one of ordinary skill in the art that, in one embodiment, one or more PDU 400 devices may be employed in a single
25 installation. Furthermore, suitable encoding of the communication signal will enable custom notification wherein a first group of one or more PDU 400 devices receives and communicates notification for predetermined events sensed by module 200 while a second group of one or more PDU 400 devices does not communicate notification to a user.

30 One embodiment of present system 100 is shown in Figure 7 which depicts entry door 260 of a residence. Entry door 260, is equipped with lock 275, handle 280 and module 200D mounted on the exterior of the residence and

proximate to entry door 260. Also shown in Figure 9 is entry light 265 for illuminating the entry area, including entry mat 285. In one embodiment, module 200 is in wireless communication with other devices, or PDU 400B, shown in the figure as cellular telephone, via link 220A, and PDU 400A, shown in the figure as a two-way pager, via link 220B. Exterior module 200D is also in wireless communication with base 250A. As depicted herein, base 250 includes LD comm module as well as user operable controls and display to enable programming and operation of system 100. In one embodiment, the wireless communication between module 200D and base 250A includes BLUETOOTH® communication technology. As previously described, module 200D, in one embodiment, is in wireless communication with PDU 400B, via link 220B, base 250A, via link 205, or PDU 400A, via link 220A.

In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400. The digital message may be communicated directly from module 200 to PDU 400B, for example, either directly (via link 220B), or indirectly, via LD comm module 250A. In one embodiment, the communication to, and from, module 200D involves a BLUETOOTH® channel. In this example, the user receives notification of the presence of the caller by means of PDU 400B. The user, and PDU 400B, may be located inside the residence, in which case a direct connection using link 220B may be possible. Alternatively, the user, and PDU 400B, may be located outside of the residence, in which case, an indirect link, including link 205 coupling the LD comm module 250A may be employed. In either case, the caller is unlikely to perceive the actual location of the user. Furthermore, by way of operating the controls or a numeric keypad on PDU 400B, the user may control the operation of entry light 265 or lock 275 and thereby grant access to the premises for the caller.

Figure 8 depicts a top view of one embodiment of the present system as installed at an entry door 260 of a residence. Door 260 is positioned in door frame 258 and includes exterior door knob 282 and interior door knob 284. The installation also includes exterior module 200D and interior module 200E.

- 5 Exterior module 200D includes video camera 370, exterior keypad 305 and an intercom. Other sensors or detector modules are also contemplated as part of exterior module 200D, such as, for example, a doorbell. Interior module 200E includes interior motion detector/video camera 310, light switch 315 and keypad/control 320. Door 260 is also fitted with deadbolt lock 275 (or door bolt)
- 10 and door contact 290. Floor mat 285 is shown for purposes of clarity.

- In one embodiment, a caller standing in the vicinity of entry mat 285 signals their arrival by actuating a doorbell button, incorporated in exterior module 200D, in the customary manner. In one embodiment, arrival of the caller is detected by video camera 370. In response to actuation of the button, or
- 15 detection by camera 370, exterior module 200D transmits a wireless signal. In one embodiment, the wireless signal is transmitted using a BLUETOOTH® communication channel. The signal is communicated to PDU 400 (not shown in this figure). A user, equipped with PDU 400 can respond in a number of ways. In one embodiment, the user may elect to open an audio communication channel
- 20 by entering a command using PDU 400. Upon opening an audio communication channel, the caller and user can engage in bidirectional verbal discourse. In one embodiment, the user may opt to receive a graphical image of the caller using PDU 400. Entry of an appropriate command causes exterior module 200D to capture an image using exterior video camera 370 and transmit said image to
- 25 PDU 400. The graphical image may include a still image or real-time video images. In one embodiment, a user at a remote locations can enter a command at PDU 400 to cause deadbolt 275 to engage or disengage. In one embodiment, one or more of the aforementioned operations are available using PDU 400.

- In one embodiment, the aforementioned communications with exterior
- 30 module 200D can be performed using interior module 200E in lieu of PDU 400. Both exterior module 200D and interior module 200E communicate using a BLUETOOTH® communication channel and thus are able to engage in direct

communication when mounted sufficiently close to each other. Also, like PDU 400, interior module 200E can control the operation of the exterior module 200D as well as the deadbolt lock 275 and camera 370.

One embodiment of exterior module 200D of the present system, having
5 doorbell button 325 and keypad 305 is depicted in Figure 9. Exterior module 200D includes alpha-numeric keypad 305 for receiving coded information. For example, in one embodiment, an authorized callers can enter a predetermined code sequence to cause deadbolt lock 275 (Figure 8) to engage or disengage. Also, a user can enter a code sequence in PDU 400, for wireless transmission to
10 exterior module 200D, and operate deadbolt lock 275. In one embodiment, module 200D includes a card reader for receipt of identification information from a caller. The card reader may include a smart-card reader or a magnetic card reader.

Wireless transmissions with exterior module 200D are communicated
15 using transceiver 150D. In one embodiment, a code sequence entered using alphanumeric keypad 305 or PDU 400 can operate entry light 265 (Figure 7) or other devices or appliances. Exterior module 200D also includes video camera 370. In one embodiment, images captured using camera 370 can be transmitted to other devices, including PDU 400 or interior module 200E (Figure 8) or base
20 250A (Figure 7). In one embodiment, exterior module 200D includes intercom 330 for conducting intercom, or audio communication functions. In one embodiment, intercom 330 includes an audio transducer. In one embodiment, intercom 330 includes a speaker and a microphone.

In one embodiment, exterior module 200D is of a size and configuration
25 to fit within scheduled electric boxes or fixtures. In one embodiment, the power to operate exterior module 200D is derived from the metered electric service already available at the electric box in which module 200D is mounted. In one embodiment, module 200D is battery operated.

Figure 10 depicts one embodiment of interior module 200E having
30 intercom 335, push-to-talk ("PTT") switch 320, interior motion detector/video camera 310, transceiver 150E and light switch 315. Intercom 335, in conjunction with PTT switch 320, enables bidirectional wireless communication.

Intercom 335 can be adapted to communicate with exterior module 200D, PDU 400, base 250A (Figure 7) or other compatible device. Similarly, detected motion or video images captured by camera 310 can be communicated with PDU 400, base 250A, or other compatible device. In one embodiment, interior
5 module 200E is of a size and configuration to fit within scheduled electric boxes or fixtures. In one embodiment, power for interior module 200E is derived from the metered electric service already available at the electric box in which module 200E is mounted. In one embodiment, power is supplied by a battery. In one embodiment, switch 315 operates a household light, power outlet or other
10 appliance.

In one embodiment, the present system can arm or disarm a security system as a function of an image captured by video camera 370 (Figure 8), data received from deadbolt lock 275, or door contact 290. For example, in one embodiment, when door 260 is closed, as determined by contact 290, or the
15 deadbolt 275 is engaged, and the image captured by camera 370 corresponds to an authorized user or caller, then transceiver 150D (Figure 9) sends a signal, on a wireless link, to other modular security system components (such as base 250A, Figure 7), causing perimeter security system components to be armed and interior security system components to be disarmed. Alternatively, when the
20 sensors associated with module 200D, or 200E, indicate the absence of an authorized caller or user, then in one embodiment, both the interior and exterior security system sensors are activated. In one embodiment, deadbolt 275 includes a plunger-type switch to sense the bolt position. Modular security system components are described in a subsequent section of this document.

Figure 11 depicts one embodiment of the present system. In the
25 embodiment shown, the system includes alarm clock and display 340. Devices other than an alarm clock are also contemplated, as, for example, a cordless telephone with display. The alarm clock of Figure 11 is typically positioned in a sleeping room and, thus, is convenient for managing and controlling home
30 devices and appliances, as well as providing easy communication with other modules. Module 200F includes display 340 and user operable control buttons 342, 344 and 346. Module 200F is operable as an ordinary alarm clock having a

digital display of the time appearing on display 340. Control buttons 342, 344 and 346 are operable for setting the current time as well as an alarm time. Module 200F is powered by metered service, internal battery, or both. Module 200F includes a wireless transceiver for control of, or communication with, other wireless modules. In one embodiment, the wireless transceiver operates using BLUETOOTH® communication technology. In Figure 11, module 200F is shown in communication with coffee maker 200G via wireless link 202G, television 200H via wireless link 202H, and furnace 200K, via wireless link 202K and air conditioner 200J via wireless link 202J. In one embodiment, coffee maker 200G, television 200H, furnace 200K and air conditioner 200J are equipped with wireless communication modules. In one embodiment, coffee maker 200G, television 200H, furnace 200K and air conditioner 200J are coupled to a suitably equipped outlet, as described subsequently with regard to Figure 18 or other interface module incorporating the present system.

Module 200F includes suitable programming for the control of such modules. In one embodiment, a user can operate control buttons 342, 344 and 346 to cause module 200F to display, using display 340, a menu of control options concerning each of the various modules. In one embodiment, operation of button 342 enables selection of a desired output device for control by module 200F. For example, the user can select to control coffee maker 200G and furnace 200K by manipulation of control 342. In one embodiment, a coffee maker menu appears in display 340. Again, using buttons, 342, 344 and 346 a user can program the system to cause the coffee maker to perform desired functions according to a programmed schedule. In one embodiment, second button 344 enables a user to select a time for control or operation of the desired output. For example, a user can select to operate a selected output device according to an absolute time. In other words, a user can choose to brew coffee using coffee maker 200G every day at 9:00 AM or other desired time. Button 344 also allows a user to select a relative time for operating a selected output device. For example, a user can configure module 200F to cause the furnace to seek a temperature of 68 degrees Fahrenheit every day at 30 minutes prior to the wake-up alarm setting. As another example, a user can configure the system to

begin brewing coffee thirty minutes prior to sounding the wake-up alarm, and also shut off the power to the coffee warming element 120 minutes after sounding the wake-up alarm. Button 344 also enables a user to select a default, or pre-programmed time for operating a selected appliance. For example, the
5 manufacturer may have configured module 200F to operate a selected output device daily at 8:30 AM unless otherwise provided. Button 346 is operable for setting the clock and for setting an alarm function.

In one embodiment, a user can arm or disarm selected elements of a security system using module 200F. In one embodiment, the user can interact
10 with a caller at an entry door, via exterior module 200D. Upon reading and understanding this description, one of skill in the art will recognize that functions available using PDU 400 are also available using module 200F.

Figure 12 depicts a base station with LD comm module 250A in one embodiment of the present system. In one embodiment, base 250A is in
15 communication with communication network 300 via wireless link 210. Communication network 300 may include, but is not limited to, a cellular telephone network, a CELLEMETRY® network, a two-way pager network, a public switched telephone network or a radio frequency network. Communication network 300 enables long range communication.

Figure 13 depicts one embodiment of the present system. In one embodiment, module 200L is responsive to heat. In one embodiment, module 200L is responsive to smoke. In one embodiment, module 200L is battery powered, and in one embodiment, module 200L is powered by metered electric service. Module 200L is coupled via a wireless link to other wireless modules
20 within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 14 depicts one embodiment of the present system. In one embodiment, modules 200M are responsive to glass breakage of glass panes in window 500. In one embodiment, modules 200M are battery powered, and in
30 one embodiment, modules 200M are powered by metered electric service. Wireless links couple modules 200M to other wireless devices or modules

within the system. In one embodiment, the wireless links comprise BLUETOOTH® communication technology.

Figure 15 depicts one embodiment of the present system. In one embodiment, module 200N includes a video camera mounted to a wall. In one
5 embodiment, module 200N captures and transmits video images and may be battery powered or powered by metered electric service. Module 200N is coupled via wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

10 Figure 16 depicts one embodiment of the present system installed at entry door 510. In one embodiment, module 200Q includes a magnetic contact to detect the position of door 510 relative to door frame 505. Module 200Q is battery powered or powered by metered electric service. Module 200Q is coupled by wireless link to other wireless devices or modules within the system.
15 In one embodiment, the wireless link comprises BLUETOOTH® communication technology. Figure 16 also depicts module 200R including deadbolt lock with bolt receiver. In one embodiment, module 200R comprises a sensor to detect the position of the deadbolt lock. Signals generated by module 200R are communicated via wireless link to other wireless devices or modules
20 within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 17 depicts one embodiment of the present system. In Figure 17, module 200S includes a motion sensor mounted on a wall surface and detects motion of people and animals within the room. In one embodiment, module
25 200S may be battery powered or powered by metered electric service. In one embodiment, module 200S may include a passive infrared motion sensor. Module 200S is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

30 Figure 18 depicts one embodiment of the present system. In Figure 18, wall mounted duplex outlet 520 is coupled via wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises

BLUETOOTH® communication technology. In response to other wireless modules within the system, including PDU 400, module 200S alternatively powers or unpowers appliances and devices that are connected to outlet 520. In one embodiment, power for the operation of module 200S is derived from the
5 line current supplying outlet 520.

Figure 19 depicts one embodiment of the present system. In Figure 19, module 200U includes a siren, or other sounding device, for sounding an alarm. In one embodiment, module 200U may be battery powered or powered by metered electric service. Module 200U is coupled by wireless link to other
10 wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 20 depicts one embodiment of the present system. In Figure 20, module 200V includes a doorbell for signaling callers. In one embodiment, module 200V is battery powered or powered by metered electric service.
15 Module 200V communicates by wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 21 depicts one embodiment of the present system. In Figure 21, module 200X includes a monitor for receiving and transmitting audio. In one
20 embodiment, module 200X includes audio transducer 530 and control button 535. Activation of control button 535, in one embodiment, operates to send an emergency assistance request to PDU 400 or other module. Module 200X is operable as a room or baby monitor. In one embodiment, module 200X is operable as part of a bidirectional intercom system. In one embodiment, module
25 200X may be battery powered or powered by metered electric service. Module 200X is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 22 depicts one embodiment of the present system. In Figure 22,
30 module 200Y includes a monitor for receiving and transmitting audio and transmitting video sensed by optical sensor 540. In one embodiment, module 200Y includes audio transducer 530, control button 535, and optical sensor 540.

Module 200Y is operable as a room or baby monitor. In one embodiment, module 200Y is operable as a part of a bidirectional audiovisual intercom system. In one embodiment, module 200Y may be battery powered or powered by metered electric service. Module 200Y is coupled by a wireless link to other
5 wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 23 depicts one embodiment of the present system. In Figure 23, module 200Z includes a building environmental control device. In one embodiment, module 200Z includes a thermostat. In one embodiment, module
10 200Z includes a humidistat. In one embodiment, module 200Z includes programming to allow a user to enter, or select, a schedule for operating and controlling heating, ventilation or air conditioning ("H/VAC") equipment. Module 200Z includes visual display 545 and user operable control 550. In one embodiment, module 200Z may be battery powered, powered by metered electric
15 service, or powered by a system voltage used to operate the heating, ventilating, or air conditioning equipment. In one embodiment, the system voltage is a low voltage 24 VAC service. Module 200Z is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology. In operation, one
20 embodiment enables a user to control the operation of heating, ventilating, or air conditioning equipment from PDU 400. In addition, one embodiment provides that measured or sensed data is transmitted to PDU 400 for the benefit of a user. In addition, one embodiment having control 550, enables a user to program and determine the operation the H/VAC equipment. Other functions are also
25 contemplated, including programming of the H/VAC system operation, monitoring the H/VAC system integrity or troubleshooting operation of various system components.

Figure 24 depicts one embodiment of the present system. In Figure 24, module 200AA is an atmospheric condition monitoring device. In one
30 embodiment, module 200AA is a thermometer. In one embodiment, module 200AA is a barometric pressure monitor. In one embodiment, module 200AA includes a first display 555 and a second display 560 for monitoring outdoor and

indoor air temperature, respectively. Data generated by module 200AA may also be communicated to other devices, including, for example, PDU 400 for display to the user or to environmental or H/VAC system control equipment such as that depicted in Figure 23. In one embodiment, module 200AA may be battery
5 powered, system (or appliance) power or powered by metered electric service. Module 200AA is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 25 depicts one embodiment of the present system. In Figure 25,
10 module 200AB is another embodiment of an atmospheric condition monitoring device. In one embodiment, module 200AB includes a temperature probe or other remote sensor. In one embodiment, module 200AB operates in conjunction with, and communicates with the module of Figure 24 or Figure 23. Data generated by module 200AB may also be communicated to other devices,
15 including, for example, PDU 400 for display to the user or to environmental or H/VAC system control equipment. In one embodiment, module 200AB may be battery powered, solar powered or powered by metered electric service. Module 200AB is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH®
20 communication technology.

Figure 26 depicts an organizational diagram for one embodiment of a module system as herein described. Modular system 100 includes a security system 565 and an environmental controls and monitoring system 570. Security system 565 may also provide safety features.

25 In the embodiment shown, security system 565 includes detection system 575 and notification system 580. Other systems are also contemplated, including for example, configuration, programming and diagnostic or troubleshooting systems. Detection system 575 include components such as a motion detector (including a passive Infrared "PIR" sensor), a door or window contact or a video
30 camera. Notification system 580 includes components such as a wireless communication link, a PDU 400 device, a visual display, or an alarm clock-based control such as that depicted in Figure 11. Safety system components may

include an emergency call button module or a portable personal locator module driven by a global positioning satellite system (GPS) or other situational sensor.

In the embodiment shown, environmental controls and monitoring system 570 includes sensors and detectors 585, reporting 590 and actuators and transducers 595. Other systems are also contemplated, including for example, configuration, programming and diagnostic or troubleshooting systems. Sensors and detectors 585 include components such as a temperature probe, a position sensor (for determining an actuator position) or a fluid or gas detector.

Reporting 590 includes components such as a wireless communication link, a PDU 400 device, a visual display, or an alarm clock-based control such as that depicted in Figure 11. Actuators and transducers 595 may include components such as a thermostat control, a sounding device such as a siren and others.

Figure 27 depicts one embodiment of the present system configured for building security and environmental control. In Figure 27, PDU 400 is wirelessly coupled to a plurality of sensor or control modules. PDU 400 is operable to wirelessly manage the system from a short range as well as a long range. In Figure 27, the system comprises perimeter modules 620A, 620B and 620C. In one embodiment, modules 620A, 620B and 620C may include a door contact, a video camera, a glass breakage detector, or other types of modules configured to detect a security breach occurring at the perimeter of a building or premises. Figure 27 also depicts a plurality of interior sensor modules, designated 625A, 625B and 625C. In one embodiment, modules 625A, 625B and 625C may include a motion detector, a video camera, a proximity detector, an intercom or monitor or other types of sensors configured to detect a security breach occurring in the interior of a building or premises. Figure 27 also depicts a plurality of building control or sensor modules, designated 630A and 630B. In one embodiment, modules 630A and 630B may include a thermostat, a humidistat, an electric window blind, an air conditioner control, a door lock control or other types of controls or sensors configured to manage a building or premises. Figure 27 also depicts a plurality of power control modules, designated 635A and 635B. In one embodiment, modules 635A and 635B may include power outlets coupled to such devices as a coffee maker, a television or

VCR, a floor lamp or other types of appliances or devices. Figure 27 also depicts a plurality of reporting sensor modules, designated 640A, 640B and 640C. In one embodiment, modules 640A, 640B and 640C may include a smoke detector, a freeze detector, a carbon monoxide detector, an interior/exterior
5 temperature detector, or other types of sensors configured to facilitate management of a building or premises. In one embodiment, a reporting sensor module may include a device configured to monitor salt levels in a water softener. Such a sensor can communicate wirelessly with PDU 400 to report the need for servicing of a water softener. In one embodiment, a reporting sensor
10 may include a device configured to monitor the status or operation of an air filter in a heating or ventilation system. Such a sensor can communicate wirelessly with PDU 400 to report the need for servicing of the filter. In one embodiment, a reporting sensor may include a module configured to monitor the condition of a rain gutter or eave trough. Such a module can communicate wirelessly with
15 PDU 400 to report the need for servicing of a rain gutter or eave trough. Other such modules are also contemplated by the present description.

Figure 28 depicts another embodiment of the present system. Figure 28 depicts a computer 700 coupled to keyboard or input device 705, and display monitor 710. Computer 700 includes a processor, memory and preferably
20 includes one or more disk drives. Computer 700 also includes a module having a wireless transceiver for communication with other modules or PDU 400 devices. In one embodiment, the wireless communication of data is conducted using BLUETOOTH® communication technology. Programming operable on computer 700 enables management of the sensors, devices, controls or modules
25 of the present system. In one embodiment, menu-driven programming enables a user to configure the system to report predetermined conditions to a local or remote PDU 400 or a remote monitoring facility. In one embodiment, the system reports to an e-mail address. In one embodiment, the system reports to an Internet address. In one embodiment, suitable programming enables a user to
30 configure the system to periodically report predetermined conditions needing servicing. For example, periodic cleaning of a gutter or eave trough can be

enunciated to a portable PDU 400 configured to wirelessly communicate with the present system.

Figure 29 depicts control program 720 and representative modules controllable using one embodiment of the present system. For example, module 5 725 may include an alarm clock module which can be wirelessly managed and controlled using program 720 operating on computer 700. As another example module 730 may include a furnace filter sensor that can be wirelessly monitored using program 720 operating on computer 700. Other modules are also depicted, enumerated 735, 740, 745 and 750, each of which may include any type of 10 module herein disclosed, including, for example, sensors for managing the operation of a water softener, monitoring and managing exterior building maintenance, operating and maintaining a coffee maker, operating a television or entertainment center or operating a furnace. In one embodiment, the wireless communication of data is conducted using BLUETOOTH® communication 15 technology.

In the embodiment of Figure 29, LD comm module 755 is shown coupled to control program 720. In operation, LD comm module can be configured by program 720 to communicate with a predetermined network selected from a plurality of networks. As another example, LD comm module can be configured 20 to communicate with a predetermined PDU 400 using a preselected schedule for communicating. In other words, one example provides that for weekdays, LD comm module 755 communicates using a two-way pager network and directs all communications to a PDU 400 carried by a first person, and on weekends, LD comm module 755 is configured to communicate with a second person using a 25 PDU 400 over a cellular telephone network. Other configurations and combinations are also contemplated. As another example, control program 720 may be configured to report H/VAC equipment status to a first PDU 400 and security system signals to a second PDU 400.

Figure 31 illustrates a block diagram of one embodiment of present 30 system 10000. System 10000, illustrated by the dashed box, includes processor 12000, power supply 12500, transceiver 13000, programming 15000 and position sensor 15500. Processor 12000 is coupled to, and executes,

programming 15000. Processor 12000 is also coupled to elements labeled power 12500 and transceiver 13000.

In the figure, GDO 1000 represents a garage door opener which may include system 1000 as previously described relative to Figure 32. It will be appreciated that, for purposes of this description, the garage door opener 1000 is not included in the system. However, other embodiments of the system are also contemplated, one of which includes the garage door opener as part of the system.

Processor 12000 may include a microprocessor as well as memory to perform the programmed functions and to retain settings and configuration information. Processor 12000 may also include a driver circuit to provide an electrical signal at a level sufficient to operate the garage door opener. Processor 12000 may also include a circuit to receive electrical signals from electrical, or electromechanical sensors and monitors and to provide an electrical signal to drive an actuator.

Power supply 12500 represents a power supply system that provides electrical energy for system 10000. As described in a subsequent section, power supply 12500 may include a battery power supply and a line powered supply.

Programming 15000 may include the instructions and data to enable the processor to perform the functions of the present system. Among the programming functions in one embodiment are instructions for causing processor 12000 to actuate a particular control upon receiving a predetermined signal. For example, if a garage door position sensor indicates that the door is in a raised position and an obstruction in the path of the garage door travel is detected by an optical sensor, then a signal received by the processor requesting the door to be closed is met with programming requesting that the obstruction be cleared before the door will travel. Processor 12000 and programming 15000 may include logic gates, circuitry or software to accomplish the selected functions.

Transceiver 13000 represents a wireless receiver and transmitter able to communicate using both a long range communication protocol and a short range communication protocol. For example, in one embodiment, the transceiver

module includes two separate transceivers, namely, a long range transceiver 13500 for long range communications, such as that used with cellular telephone communications and second transceiver for communicating over a short range. A short range communication protocol, such as BLUETOOTH®, allows wireless
5 communications over distances commonly thought of as premises-based. It will be further appreciated that with suitable repeaters, gateways, switches or networks, the effective range of communication of transceiver 13000 may be extended to any distance.

In one embodiment, transceiver 13000 communicates, using a short range
10 protocol, with a second transceiver that communicates using a long range protocol. For example, transceiver 13000 may include a BLUETOOTH® transceiver and may communicate with a second transceiver. The second transceiver, in addition to having a BLUETOOTH® section, also interfaces with a long range communication network. For example, the second transceiver may
15 include a BLUETOOTH® transceiver and a connector that interfaces with a public switched telephone network (PSTN), a cellular telephone network, a pager network or other network having a long range communication protocol.

According to one definition, and subject to the vagaries of radio design and environmental factors, short range may refer to systems designed primarily
20 for use in and around a premises and thus, the range generally is below a mile. Short range communications may also be construed as point-to-point communications, examples of which include those compatible with protocols such as BLUETOOTH®, HomeRF™, and the IEEE 802.11 WAN standard (described subsequently). Long range, thus, may be construed as networked
25 communications with a range in excess of short range communications. Examples of long range communication may include, Aeris MicroBurst cellular communication system, and various networked pager, cellular telephone or, in some cases, radio frequency communication systems.

In various embodiments, a user may communicate with system 10000
30 using a telephone coupled to the public switched telephone network (PSTN), a cellular telephone, a pager (either one way or two way), a personal

communication device (such as a personal digital assistant, PDA), a computer, or other wired or wireless communication device.

Position sensor 15500 is coupled to processor 12000. In various embodiments, sensor 15500 may include one or more magnetic switches, contact
5 switches, optical devices or cameras. For example, in one embodiment, sensor 15500 includes a first magnetic switch to detect door 4000 in an open position and second magnetic switch to detect door 4000 in a closed position. Sensor 15500 may be connected to processor 12000 by a wired connector or by a wireless link. Sensor 15500 provides an electrical signal corresponding to the
10 position of door 4000. The input to sensor 15500 may be derived from door 4000, trolley 2500, or other member that provides reliable information relative to the position of door 4000.

An embodiment of transceiver 13000 is illustrated in Figure 32. Transceiver 13000A is coupled to processor 13000 by link 132A. In the figure,
15 transceiver 13000A is shown having compatibility with both a cellular telephone protocol 13500A and a BLUETOOTH® protocol 14000A. Other long range communication protocols may include, but are not limited to, cellular telephone protocols, one way or two-way pager protocols, and personal communication service (PCS) protocols. Examples include Time Division Multiple Access
20 (TDMA), 3G, Aloha, Global System for Mobile Communications (GSM), Code-Division Multiple Access (CDMA), Short Message Service (SMS) and General Packet Radio Service (GPRS).

Personal Communications Service (PCS) describes a set of cellular technologies employing CDMA (also known as IS-95), GSM, or North
25 American TDMA (also known as IS-136) air interfaces. PCS systems typically operate in the 1900 MHZ frequency range.

Time Division Multiple Access (TDMA) describes a digital wireless technology using time-division multiplexing (TDM) in which a radio frequency is time divided and slots are allocated to multiple calls. TDMA is used by the
30 GSM digital cellular system.

A third specification, known as 3G, promulgated by the ITU (International Telecommunication Union, headquarters in Geneva, Switzerland)

represents a third generation of mobile communications technology with analog and digital PCS representing first and second generations. 3G is operative over wireless air interfaces such as GSM, TDMA, and CDMA. The new EDGE (Enhanced Data rates for Global Evolution) air interface has been developed
5 specifically to meet the bandwidth needs of 3G.

Another protocol, known as Aloha, enables satellite and terrestrial radio transmissions.

Global System for Mobile Communications, GSM, is another digital cellular system and uses TDMA, thus allowing eight simultaneous calls on the
10 same radio frequency.

Code-Division Multiple Access (CDMA) is a digital cellular technology that uses spread-spectrum techniques. CDMA does not assign a specific frequency to each user but rather every channel uses the full available spectrum and individual conversations are encoded with a pseudo-random digital
15 sequence.

Another transmission protocol, Short Message Service (SMS) allows communications of short messages with a cellular telephone, fax machine and an IP address. Messages are generally limited to a length of 160 alpha-numeric characters.

20 General Packet Radio Service (GPRS) is another standard used for wireless communications and operates at transmission speeds far greater than GSM. GPRS can be used for communicating either small bursts of data, such as e-mail and Web browsing, or large volumes of data.

The short range communication protocol may include, but is not limited to, wireless protocols such as BLUETOOTH®, HomeRF™, wireless LAN (WLAN) or other personal wireless networking technology.

BLUETOOTH® is a trademark registered by Telefonaktiebolaget LM Ericsson of Stockholm, Sweden and refers to short range communication technology developed by an industry consortium known as the BLUETOOTH®
30 Special Interest Group. BLUETOOTH® operates at a frequency of approximately 2.45 GHZ, utilizes a frequency hopping (on a plurality of frequencies) spread spectrum scheme, and provides a digital data transfer rate of

approximately 1Mb/second. In one embodiment, the present system includes a transceiver in compliance with BLUETOOTH® technical specification version 1.0, herein incorporated by reference. In one embodiment, the present system includes a transceiver in compliance with standards established, or anticipated to be established, by the Institute of Electrical and Electronics Engineers, Inc., (IEEE). The IEEE 802.15 WPAN standard is anticipated to include the technology developed by the BLUETOOTH® Special Interest Group. WPAN refers to Wireless Personal Area Networks. The IEEE 802.15 WPAN standard is expected to define a standard for wireless communications within a personal operating space (POS) which encircles a person. In one embodiment, the transceiver is a wireless, bidirectional, transceiver suitable for short range, omnidirectional communication that allows ad hoc networking of multiple transceivers for purposes of extending the effective range of communication. Ad hoc networking refers to the ability of one transceiver to automatically detect and establish a digital communication link with another transceiver. The resulting network, known as a piconet, enables each transceiver to exchange digital data with the other transceiver. According to one embodiment, BLUETOOTH® involves a wireless transceiver transmitting a digital signal and periodically monitoring a radio frequency for an incoming digital message encoded in a network protocol. The transceiver communicates digital data in the network protocol upon receiving an incoming digital message.

In general, the effective communication range of BLUETOOTH® is relatively short, sometimes characterized with a maximum range of approximately 10 to 100 meters. The short range capabilities of BLUETOOTH® are suitable for premises-based applications, such as data exchange within a range roughly equal to the lineal boundaries of a typical property, or premises.

Communication range can be extended beyond this range by a number of different methods. For example, the range may be extended by coupling a BLUETOOTH® connection with a cellular telephone network, a narrow band personal communication systems ("PCS") network, a CELLEMETRY network, a narrow band trunk radio network or other type of wireless communication link.

Examples of PCS technology includes Code-Division Multiple Access (CDMA by Qualcomm Inc.), ReFLEX (by Motorola), Time Division Multiple Access (TDMA), Global Systems for Mobile communications (GSM) or others.

5 A user with a cellular telephone, or other cellular device, is then able to communicate with the BLUETOOTH® device as though the user was local. The long distance network may include communications using a control channel. One such example is CELLEMETRY®. CELLEMETRY® is a registered trademark of Cellemetry LLC of Atlanta, Georgia, USA, and enables digital communications over a cellular telephone control channel. Other examples of
10 communication technology are also contemplated, including MicroBurst™ technology (MicroBurst™ is a trademark of Aeris.net, Inc.) or short message service (SMS). In one embodiment, the long distance network may include a pager network. In one embodiment, the pager network is a two-way pager network enabling bidirectional communication between a BLUETOOTH®-
15 enabled sensor, or device, and a user controlled pager. In one embodiment, the long distance network includes a narrow band Personal Communication System network. In one embodiment, the long distance network may include a telephone network. The telephone network may include communicating using an intranet or the Internet. Coupling to such a network may be accomplished, for
20 example, using a variety of connections, including a leased line connection, such as a T-1, an ISDN, a DSL line, or other high speed broadband connection, or it may entail a dial-up connection using a modem. In one embodiment, the long distance network may include a radio frequency or satellite communication network. In addition, one or more of the aforementioned networks may be
25 combined to achieve desired results.

Another short range communication protocol, known as HomeRF™, currently defined by specification 2.1, provides support for broadband wireless digital communications at a frequency of approximately 2.45 GHZ. HomeRF™ specification 2.1 is herein incorporated by reference.

30 Other long range and short range communication protocols are also contemplated and the foregoing examples are not to be construed as limitations but merely as examples.

Transceiver 13000 may be compatible with more than two communication protocols. For example, transceiver 13000 may be compatible with three protocols, such as a cellular telephone communication protocol, a two-way pager communication protocol, and BLUETOOTH® protocol. In such a case, a particular garage door opener may be operable using a cellular telephone, a two-way pager, or a device compatible with BLUETOOTH®. Furthermore, it will be appreciated that each of the aforementioned devices, namely a cellular telephone, a two-way pager, and a device compatible with BLUETOOTH®, may be combined in a single portable housing.

Transceiver 13000 may include circuitry to allow communications on more than one protocol. For example, position information may be received on a pager protocol and a user may transmit a command to operate the door opener using a cellular telephone protocol.

Figure 33 illustrates an embodiment of transceiver 13000B that is compatible with a pager protocol 13500B and a BLUETOOTH® protocol 14000B. Transceiver 13000B is coupled to processor 13000 by link 132B. Pager protocol 13500B may include one way or two way pager protocols. Examples of one way pager protocols include Post Office Code Standardisation Advisory Group (POCSAG), Swedish Format (MBS), the Radio Data System (RDS, by Swedish Telecommunications Administration) format and the European Radio Message System (ERMES, by European Telecommunications Standards Institute) format, Golay Format (by Motorola), NEC-D3 Format (by NEC America), Mark IV/V/VI Formats (Multitone Electronics), Hexadecimal Sequential Code (HSC), FLEX™ (Motorola) format, Advanced Paging Operations Code (APOC, by Philips Paging) and others. Examples of two way pager protocols include ReFLEX™ (Motorola) format, InFLEXion™ (Motorola) format, NexNet™ (Nexus Telecommunications Ltd. of Israel) format and others.

In one embodiment using a pager system, system 1000 provides a pager signal to indicate the position of the door or any other information relative to the garage or the door opener. Using a one way pager, the user may operate the door opener, or operate an actuator, using another communication channel, including for example, a cellular telephone or a personal communication device. Using a

two way pager, the user may operate the door opener, or operate an actuator, using the reply communication channel of the pager. The outbound signal (e.g., indicating the door position) may be transmitted to the pager on a predetermined schedule, or upon inquiry, or upon a change of position of the door (or actuator) at any time.

Figure 34 illustrates one embodiment of power supply 12500A. Battery power 12700 may include a dry cell, a gel cell, or other power supply. In addition, battery power 12700 may include rechargeable batteries. The recharging power may be supplied by line power 12800, solar power derived from sunlight, or other available means. Line power 12800 may include 110 volt metered electric service, 220 volt metered electric service, or other convenient electrical service. In one embodiment, door opener 1000 includes a plug-in power cord which couples to a nearby electrical outlet. In such a case, the battery power 12700 is received from line power 12800.

In the event of a power outage, or other interruption of the metered electric service, door opener 1000 may not be operable. However, battery power 12700 has sufficient capacity to continue powering processor 12000, transceiver 13000, and position sensor 15500. Battery power 12700 allows the user to continue to wirelessly receive information regarding the position of the door regardless of the status of line power 12800. In one embodiment, transceiver 13000 provides a wireless signal to the user to indicate that line power 12800 has been restored.

Figure 35 illustrates a variety of sensors, actuators, and transducers coupled to processor 12000. Driver circuits and receiver circuits may be employed between the sensors, actuators, and transducers to provide a signal level compatible with that of the processor. In various embodiments, one or more of the following sensors, actuators, and transducers may be included in system 10000. In one embodiment, system 10000 includes apparatus to provide a camera view of the door. The camera view may be derived from a video camera or still camera as part of system 10000 and the view may represent full motion video or still photos of the door or other operated equipment.

Auxiliary sensor 16000 may be coupled to processor 12000. Sensor 16500 represents an example of an auxiliary sensor coupled to a service door or other entry. The service door may provide access to the interior of the garage or it may provide access to other areas associated with the garage. For example, 5 sensor 16500 may monitor the position of a gate at the driveway to the garage. Optical sensor 17000 may include any sensor relying on optical information to generate an electrical signal. For example, sensor 17000 may include a light source and photocell to detect hazards associated with operation of door 4000 or sensor 17000 may provide a signal to indicate if an interior or exterior garage 10 light is illuminated. Sensor 17000 may also provide a signal to indicate if it is daytime or nighttime. Temperature sensor 17500 may include a thermal element to indicate a temperature present inside the garage or external to the garage. For example, sensor 17500 may indicate a freezing hazard or an overheating condition within the garage. Temperature sensor 17500 may also be coupled to 15 door opener 1000 to indicate a dangerous overheating condition of opener 1000.

Door opener 1000 may be coupled to processor 12000. Door opener 1000 may include a system as described above relative to Figure 32.

Auxiliary sensor 18500 may be coupled to processor 12000 and may include electrical or mechanical actuators or controls other than opener 1000. 20 For example, sensor 19000 indicates a courtesy light controller. Using the remote control of the present system, a user can control an interior or exterior courtesy light. Controlling the light may include adjusting the brightness or turning it on, off or flashing the light. As another example, HVAC actuator 20000 represents any or all elements of a heating, ventilation and air 25 conditioning system. In particular, HVAC actuator 20000 may include a coupling to a mechanical actuator, thermostat, ventilation system or other control. Using the remote control of the present system, a user can control heating, ventilation, or air conditioning system. Sensor 17500 may operate in conjunction with HVAC actuator 20000. Service door operator 19500 indicates 30 a power door actuator coupled to a service door, or other entry, providing access to the interior of the garage or other space.

Audio transducer 21000 may be coupled to processor 12000 and may include a microphone, speaker, or other audio transducer. The microphone is mounted in a position to receive local audio from a caller located outside of the garage. In one embodiment, audio transducer 21000 includes a microphone
5 mounted on the external surface of the structure (or garage) having door opener 1000. Alternatively, the transducer is mounted in the interior of the garage and an orifice is provided in the garage wall to pick up sounds external to the garage. Transducer 21000, in conjunction with processor 12000, provides a voice recognition system that enables voice control of operation of door opener 1000,
10 or other actuators.

Figure 36 graphically presents a block diagram of the functions performed by the programming executing on processor 12000. Programming 15000 includes, in various embodiments, web server programming 24000, auxiliary sensors programming 26000, door opener programming 21500,
15 auxiliary actuator programming 28500 and voice recognition programming 31000. Programming may include circuitry, logical gates, software, or other elements.

Web server programming 24000 provides an interface to allow remote control of system 10000. For example, and not by way of limitation, server
20 programming 24000 may include a wireless application protocol (WAP) server that couples to a telephone (or other communication) network to allow a user to operate, program and monitor system 10000. In one embodiment, a WAP server generates data that can be accessed using an Internet browser. In such a case, for example, the user can remotely configure system 10000 to turn off heater (part of
25 HVAC system 20000) anytime door 4000 is open and the exterior temperature (as determined by temperature sensor 17500) is below 50 degrees Fahrenheit. As another example, the user can remotely configure system 10000 to block operation of door opener 1000 in response to voice commands (received by audio transducer 21000) from a selected person. Data for the user-selected
30 programming may be stored in memory coupled to processor 12000. These and other programming configurations are contemplated.

Auxiliary sensors programming 26000 may include position sensor programming 26500, temperature sensor programming 27500, and optical sensor programming 27000. Position sensor programming 26500 may include software routines and modules that receive and interpret position information derived from door position sensor 16500. Optical sensor programming 27000 may include software routines and modules that receive and interpret information from optical sensor 17000. Temperature sensor programming may include software routines and modules that receive and interpret information from temperature sensor 17500. Other sensors, and appropriate programming, are also contemplated.

Door programming may include position sensor programming 22000 and actuator programming 22500. Position sensor programming 22000 may include software routines and modules that receive and interpret position information derived from a door position sensor as part of door opener 1000. Actuator programming may include door open programming 23000 and door close programming 23500. Door open programming 23000 may include software routines and modules that raise door 4000 in response to commands received by processor 12000. Door close programming 23500 may include software routines and modules that lowers door 4000 in response to commands received by processor 12000. Both door open programming 23000 and door close programming 23500 may also include programming that executes instructions in accordance with user specified, or predetermined, configurations. Door close programming 23500 may also check for obstructions in operating the door before instructing door opener 1000 to move to a closed position.

Auxiliary actuator programming may include, for example, courtesy light control programming 29000, HVAC programming 30000 and service door control programming 29500. Courtesy light control programming 29000 may include software routines and modules that control the operation of an interior, or exterior, courtesy light associated with the garage and coupled to processor 12000 by courtesy light controller 19000. HVAC programming 30000 may include software routines and modules that control the operation of HVAC system 20000 coupled to processor 12000. Service door control programming

29500 may include software routines and modules that control the operation of service door operator 19500 coupled to processor 12000.

Programming also may include voice recognition programming 31000. Voice recognition programming 31000 may include software programming for
5 recognizing and executing instructions commensurate with a voice recognition system. The voice recognition system allows a user to speak into audio transducer 21000 and gain control over the operation of system 10000. Programming 31000 may include a security function to authenticate a voice command received by audio transducer 21000 before executing any instructions
10 to operate door opener 1000.

Other programming functions are also contemplated. For example, a predetermined default setting can be configured to control the operation of system 10000 in the absence of a user specified configuration. The user may specify a desired configuration by providing instructions through audio
15 transducer 21000, transceiver 13000, or a remote link using web server programming 24000.

Programming 15000 may also include software routines or modules to address prioritization matters. With multiple devices configured to independently control the operation of a single door opener, a problem may arise
20 if conflicting commands are simultaneously received by the system. For example, a conflict arises if a first user transmits a long range communication to open the garage door and at the same time (or shortly thereafter) a second user transmits a short range communication to close the same door. A conflict may also arise if a first user attempts to operate a door using a wired button while a
25 second user attempts to operate the same door using a transmitter compatible with a short range protocol of the present system 10000. In such cases, programming 15000 executing on processor 12000 will execute a routine to determine priority of each received command and suppress lower priority commands. For example, in one embodiment, the long range protocol may be
30 configured to be inferior to that of short range protocol and, in turn, the short range protocol may be inferior to directly wired switch coupled to opener 1000. Other priority configurations may also be established. For example,

prioritization may be determined on the basis of proximity to opener 1000, on the basis of identity of a transmitter, on the basis of signal strength received by transceiver 13000, on the basis of recency of last communication, or on any other basis. In one embodiment, the user is empowered to establish a desired
5 configuration. A default configuration may also be provided which is operable in the event that a user-defined configuration is not operable.

Programming 15000 may include instructions to cause processor 12000 to transmit position information, or any other information, using all modes of communication. In one embodiment, the user is afforded an opportunity to
10 specify the distribution of position information. For example, the user may specify that position information is to be transmitted using only a long range communication protocol during specified hours and to a particularly specified user or group of users.

Programming 15000 may also enable processor 12000 to communicate
15 with a building security system or control system. For example, in the event of a particular detected security event, door opener 1000 may be instructed to either close or open.

Figure 37 includes a flow chart describing method 35000 involving one embodiment of the present system. Method 35000 describes operation of system
20 10000 for receiving door position information and for controlling the door from a remote location.

The method starts at item 35500 and assumes that the user has a wireless device capable of communicating with transceiver 13000. At 36000, the user and system 10000 establish a link on a communication channel. At 36500, door
25 position information is received by the user. In one embodiment, sensor 15500 provides the position information to processor 12000. At 37000, the user receives notification of the door position information. The door position may be indicated by a pair of lights on a pager (one light labeled "open" and another "close"), by a graphical image on a screen, a recognizable audio tone, a
30 recognizable vibration, or any other means of indicating position to a user. At 37500, the user is presented with one or more options to control system 10000. In the case that door 4000 is open, options may include partially, or fully, closing

the door. A single option may be presented that allows the user to toggle the position of the door between a closed and an open position. The option may be a button or several buttons. At 38000, the user indicates a selection using the portable wireless device. At 38500, the wireless device encodes a message for
5 transmission to system 10000 including instructions to operate the door according to the user selection. At 39000, the message is transmitted to system 10000. The message may be routed to system 10000 on wired or wireless communication networks. The method ends at 39500.

Other Embodiments

10 In one embodiment, system 10000 is coupled to multiple door openers 1000. For example, many homes include two or more garages, each having an individual door opener. Also, commercial applications often include multiple overhead doors, each having an individual door opener. In such cases, multiple door openers 1000 may be coupled to a single system 10000 which controls and
15 reports the operation of each door opener.

In one embodiment, programming 15000 allows a user having a cellular telephone in communication with system 10000 to control and monitor each of several door openers 1000, or other systems coupled to processor 12000. In one embodiment, programming 15000 allows a user to control and monitor a single
20 door opener 1000, or other system coupled to processor 12000. Identification and group membership routines implemented by processor 12000 and programming 15000 allow for a superior user to configure the authority of multiple inferior users over multiple door openers 1000, each coupled to processor 12000, using system 10000.

25 The present system has been described, in part, relative to the operation of a garage door opener. However, it will be noted that other doors may be controlled and operated using a suitable power opener. The actuator for many garage door openers is electrically operated, however, it is understood that an actuator operable with the present system may include a pneumatically or
30 hydraulically operated actuator. Furthermore, it will be appreciated that, in addition to operating a door, the present system and method may be adapted for use with other controls, such as a window control, Venetian blind control,

skylight control, or other operable device or actuator. By way of example, the present system and method may be adapted to operate with a pet access door, a house entry door, an interior swing door, a patio sliding door, a pocket door, an apartment entry door, a sliding window, or an elevator or lift access door. For instance, the present system may be adapted for use with a handicap access door.

In one embodiment, system 10000 includes circuitry and programming to detect proximity of a compatible transceiver. For example, system 10000 may include a BLUETOOTH® compatible transceiver which implements a self-aware feature to determine the presence of a compatible device within effective range. Thus, if system 10000 detects that a compatible device is within range, then a preprogrammed function is executed. Security systems or authorization systems are included in system 10000 to ensure that any detected compatible device is authorized to exercise control over system 10000. For instance, and in one embodiment, if a BLUETOOTH® equipped wireless garage door opener is brought within a predetermined range, then system 10000 automatically operates an electric garage door opener. In particular, if the door is closed at a time when the door opener is brought within range, then system 10000 operates to open the door and if the door is open at a time when the door opener is brought within range, then system 10000 operates to close the door. As another example, one embodiment of the present system 10000 includes a BLUETOOTH® equipped wireless pet collar and a BLUETOOTH® equipped pet door opener. The pet door is thus automatically opened when a dog wearing the collar approaches the door. As yet another example, one embodiment of the present system 10000 includes a BLUETOOTH® equipped module and a BLUETOOTH® equipped handicapped-person accessible door opener. The handicapped-person accessible door is thus automatically opened when a person carrying the module approaches the door. The module may be affixed to a wheelchair or other device.

Conclusion

Other embodiments are possible and the examples provided herein are intended to be demonstrative and not exclusive or exhaustive of the present invention, which is determined by the scope of the appended claims and the full range of equivalents to which they are entitled.

WHAT IS CLAIMED IS:

1. A device comprising:
a security sensor for detecting a condition; and
5 a wireless transceiver electrically coupled to the sensor, the wireless transceiver for communicating with the security sensor, the wireless transceiver adapted for monitoring a radio frequency for an incoming digital message in a network protocol and adapted for retransmission of digital messages in the network protocol.
10
2. The device of claim 1 wherein the wireless transceiver operates on a frequency of approximately 2.45GHz.
3. The device of claim 1 or 2 wherein the wireless transceiver is
15 substantially compatible with standards under IEEE 802.15.
4. The device of any of claims 1 to 3 wherein the wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
- 20 5. The device of any of claims 1 to 4 wherein the security sensor comprises a motion sensor, a passive infrared (PIR) motion detector, a pressure sensor, a position sensor, a proximity sensor, a glass breakage sensor, or a video camera.
- 25 6. The device of any of claims 1 to 5 further comprising an environmental sensor, the environmental sensor coupled to, and in communication with, the wireless transceiver.
7. The device of claim 6 wherein the environmental sensor comprises a temperature sensor, a gas sensor, a particulate sensor, a fluid sensor, or a sound
30 sensor.

8. The device of any of claims 1 to 7 further comprising a control coupled to, and in communication with, the wireless transceiver.
- 5 9. The device of claim 8 wherein the control comprises a power control, an appliance control, an air conditioner control, a furnace control, or a ventilation control.
- 10 10. The device of any of claims 1 to 9 further comprising an operable security device coupled to the wireless transceiver.
- 11 11. The device of claim 10 wherein the operable security device comprises a lock or a siren.
- 15 12. The device of any of claims 1 to 11 wherein the wireless transceiver relays communications between a plurality of other wireless transceivers.
- 13 13. The device of any of claims 1 to 12 wherein the wireless transceiver communicates with a long range, bidirectional wireless network.
- 20 14. The device of any of claims 1 to 13 wherein the wireless transceiver communicates with a telephone, a cellular telephone, a pager, a computer, a personal communication service (PCS) device, a narrowband PCS device, a two-way pager, or a personal data assistant.
- 25 15. The device of any of claims 1 to 14 wherein the sensor and the wireless transceiver are powered by battery or metered electric service.
16. A system comprising:
a security device;
30 a first wireless transceiver electrically coupled to the security device, the first wireless transceiver adapted for communicating with the security device, monitoring a plurality of radio frequencies, retransmitting digital data in a digital

network protocol, receiving outbound data from the security device and wirelessly transmitting the outbound data using the digital network protocol, and adapted for wirelessly receiving incoming digital data in the network protocol and communicating the incoming digital data to the security device; and

- 5 a second wireless transceiver in communication with the first wireless transceiver, the second wireless transceiver adapted for monitoring the plurality of radio frequencies, receiving and retransmitting digital data in the digital network protocol, communicating outgoing data to a user, and transmitting the incoming digital data.

10

17. The system of claim 16 wherein the first wireless transceiver is a spread spectrum transceiver.

15

18. The system of claim 16 or 17 wherein the first wireless transceiver is substantially compatible with standards under IEEE 802.15.

20

19. The system of any of claims 16 to 18 wherein the first wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.

20. The system of any of claims 16 to 19 wherein the second wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.

25

21. The system of any of claims 16 to 20 wherein the second wireless transceiver is electrically coupled to a user controllable communication device.

22. The system of claim 21 wherein the user controllable communication device is in communication with a user.

30

23. The system of any of claims 16 to 22 wherein the second wireless transceiver is coupled to a telephone line, a long range transceiver, a cellular

communication network, a narrowband personal communication system network, a modem, a packetized communication network, or the Internet.

24. The system of any of claims 16 to 23 wherein the security device and the
5 first wireless transceiver are battery powered or line voltage powered.

25. A system comprising:

a first module including:

10 a microprocessor controller;
a lock coupled to the controller;
an audio transducer coupled to the controller, the audio transducer
for generating an electrical signal in response to received audio and for
generating audio in response to a received electrical signal;
15 a caller accessible identification module coupled to the controller,
the caller accessible identification module for receiving caller entered
information;

a proximity detector coupled to the controller, the proximity
detector for signaling the presence of a caller near the exterior module; and

20 a first wireless transceiver coupled to the controller, the first
wireless transceiver transmitting a digital signal received from the controller, the
first wireless transceiver monitoring a radio frequency for an incoming digital
message in a network protocol and for communicating digital data in the network
protocol upon receiving an incoming digital message; and

a second module including:

25 a second wireless transceiver in wireless communication with the
first wireless transceiver, the second wireless transceiver monitoring a radio
frequency for an incoming digital message in a network protocol and for
communicating digital data in the network protocol upon receiving an incoming
digital message; and

30 a user accessible control panel electrically coupled to the second
wireless transceiver.

26. The system of claim 25 wherein the first wireless transceiver is substantially compatible with standards under IEEE 802.15.
27. The system of claim 25 or 26 wherein the first wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
28. The system of any of claims 25 to 27 wherein the second wireless transceiver is substantially compatible with standards under IEEE 802.15.
29. The system of any of claims 25 to 28 wherein the second wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
30. The system of any of claims 25 to 29 wherein the first module is battery operated.
31. The system of any of claims 25 to 30 wherein the audio transducer comprises a speaker and a microphone.
32. The system of any of claims 25 to 31 further comprising a third wireless transceiver in communication with the first wireless transceiver and the second wireless transceiver and the third wireless transceiver is further coupled to a long range communication network.
33. The system of any of claims 25 to 32 wherein the first module further comprises a video camera and the second module comprises a video display.
34. The system of any of claims 25 to 33 wherein the proximity detector comprises a doorbell button or a video camera.
35. The system of any of claims 25 to 34 wherein the user accessible identification module comprises a keypad, a biometrics sensor, or a card reader.

36. A device comprising:
a clock;
a wireless transceiver coupled to the clock, the wireless transceiver
5 operable for retransmitting a digital signal, the wireless transceiver monitoring a
radio frequency for an incoming digital message in a network protocol and for
communicating digital data in the network protocol upon receiving an incoming
digital message;
a first control accessible to the user and coupled to the transceiver,
10 wherein actuation of the first control effectuates one of a plurality of user
selectable outputs, the user selectable outputs each coupled wirelessly to the
device; and
a second control accessible to the user, wherein actuation of the second
control selects a time for activating the one of a plurality of user selectable
15 outputs.
37. The device of claim 36 wherein the plurality of user selectable outputs
effectuable by the first control comprises activating a security system,
controlling an environmental control, or controlling a premises control.
20
38. The device of claim 36 or 37 wherein the second control accessible to the
user enables the user to select an absolute time, a predetermined time or a default
time.
- 25 39. The device of any of claims 36 to 38 wherein the wireless transceiver
communicates using an omnidirectional communication channel, the wireless
transceiver having ad hoc networking capability.
40. The device of any of claims 36 to 39 wherein the wireless transceiver is
30 substantially compatible with standards under IEEE 802.15.

41. The device of any of claims 36 to 40 wherein the wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
42. A method of communicating comprising:
5 receiving a request for service from a caller using an annunciator module;
transmitting the request as a digital message in a wireless, premises-based network protocol;
receiving the request at a remote location using a personal communication device; and
10 notifying a user of the device of the received request.
43. The method of claim 42 wherein wirelessly transmitting the request comprises transmitting the encoded request using communication technology substantially compatible with standards under IEEE 802.15.
15
44. The method of claim 42 or 43 wherein wirelessly transmitting the request comprises transmitting using BLUETOOTH® technical specification version 1.0.
- 20 45. The method of any of claims 42 to 44 further comprising:
acknowledging receipt of the signal; and
communicating between the module and the device.
- 25 46. The method of any of claims 42 to 45 wherein communicating between the module and the device comprises communicating a video image between the module and the device.
- 30 47. The method of any of claims 42 to 46 further comprising:
sending an executable command from the device;
receiving the executable command at the module; and
executing the instruction.

48. The method of claim 47 wherein sending an executable command comprises sending an executable command to operate a door lock.

49. A method, comprising:

- 5 entering a predetermined code into a portable transmitter;
 transmitting the code as a digital message in a wireless, premises-based network protocol;
 receiving the code at a receiver coupled to an operable device;
 verifying authorization of the transmitted code; and
10 operating the device.

50. The method of claim 49 wherein wirelessly transmitting the code as a digital message in a network protocol comprises transmitting using communication technology substantially compatible with standards under IEEE
15 802.15.

51. The method of claim 49 or 50 wherein transmitting the code as a digital message comprises transmitting using BLUETOOTH® technical specification version 1.0.
20

52. The method of any of claims 49 to 51 wherein operating the device comprises unlocking a door lock or operating an electric light.

53. A method of operating a security system, comprising:
25 detecting the position of a bolt;
 transmitting information corresponding to the detected position using a wireless radio frequency link in a digital, premises-based network protocol;
 receiving the transmitted information; and
 operating a security system as a function of the received information.
30

54. The method of operating a security system of claim 53 wherein operating a security system as a function of the received information comprises operating

perimeter sensors when the bolt is detected in a first position and operating perimeter sensors and interior sensors when the bolt is detected in a second position.

- 5 55. The method of operating a security system of claim 53 or 54 further comprising detecting a video image using an interior camera and wherein operating a security system further comprises operating a security system as a function of the bolt position and the detected video image.
- 10 56. The method of operating a security system of any of claims 53 to 55 wherein transmitting information corresponding to the detected position using a wireless radio frequency link in a digital network protocol comprises transmitting information corresponding to the detected position using communication technology substantially compatible with standards under IEEE
15 802.15.
57. The method of operating a security system of any of claims 53 to 56 wherein transmitting information corresponding to the detected position using a wireless radio frequency link in a digital network protocol comprises
20 transmitting information corresponding to the detected position using BLUETOOTH® technical specification version 1.0.
58. A method of remotely operating a security system, comprising,
25 executing programming on a portable communication device;
generating a visual display of options for controlling the security system;
selecting operational parameters for the security system using the display;
executing a command to implement the selected operational parameters;
and
transmitting the command and selected parameters to the security system
30 using a wireless radio frequency link in a digital, premises-based network protocol.

59. The method of claim 58 wherein transmitting the command and selected parameters comprises transmitting the command and selected parameters on a communication channel substantially compatible with standards under IEEE 802.15.

5

60. The method of claim 58 or 59 wherein transmitting the command and selected parameters comprises transmitting the command and selected parameters using BLUETOOTH® technical specification version 1.0.

10

61. A building management system comprising:
a transducer for generating data upon detecting a local event;
a first communication module coupled to the transducer, the first communication module including a first transceiver for wirelessly transmitting transducer data in a premises-based, digital network protocol; and
15 a second communication module for wirelessly communicating with the first communication module, the second communication module further including:

a second transceiver for communicating with the first communication module using the digital network protocol; and
20 a user operable device coupled to the second transceiver, the user operable device adapted for communicating with the transducer via the digital network protocol.

62. The building management system of claim 61 wherein the first
25 communication module and the second communication module communicate using communication technology substantially compatible with standards under IEEE 802.15.

63. The building management system of claim 61 or 62 wherein the first
30 communication module and the second communication module communicate using BLUETOOTH® technical specification version 1.0.

64. The building management system of any of claims 61 to 63 wherein the first communication module further comprises a controllable member, wherein the controllable member is operated as a function of the user operable device.

5 65. A method of communicating, comprising:
detecting a user controlled action;
generating encoded data as a function of the user controlled action;
transmitting the encoded data to a remote facility using a premises-based,
digital network protocol;
10 receiving the encoded data at the remote facility; and
initiating an emergency response as a function of the encoded data.

66. The method of claim 65 wherein transmitting the encoded data to a remote facility using a digital network protocol comprises transmitting the
15 encoded data to a remote facility using communication technology substantially compatible with standards under IEEE 802.15.

67. The method of claim 65 or 66 wherein transmitting the encoded data to a remote facility using a digital network protocol comprises transmitting the
20 encoded data to a remote facility using BLUETOOTH® technical specification version 1.0.

68. The method of any of claims 65 to 67 wherein initiating an emergency response comprises summoning fire suppression aid, summoning police service,
25 or summoning medical aid.

69. The method of any of claims 65 to 68 wherein detecting a user controlled action comprises detecting a keystroke, a touch screen input, or an audible
30 command.

70. The method of any of claims 65 to 69 wherein generating encoded data comprises generating encoded data indicative of a fire emergency, a police emergency or a medical emergency.
- 5 71. A system comprising:
a passive infrared motion detector; and
a transmitter coupled to the detector, the transmitter is compatible with BLUETOOTH® technical specification version 1.0.
- 10 72. The system of claim 71 wherein the transmitter is substantially compatible with standards under IEEE 802.15.
73. The system of claim 71 or 72 further comprising a receiver coupled to the detector, the receiver is compatible with BLUETOOTH® technical specification
15 version 1.0.
74. The system of claim 73 wherein the receiver is substantially compatible with standards under IEEE 802.15.
- 20 75. A system comprising:
a passive infrared motion detector; and
a transmitter coupled to the detector, the transmitter is compatible with BLUETOOTH® technical specification version 1.0; and
a long range communication module, the module adapted for
25 communicating with the detector using the transmitter and further wherein the module is coupled to a long range communication network.
76. The system of claim 75 further comprising a receiver coupled to the detector, the receiver compatible with BLUETOOTH® technical specification
30 version 1.0 and wherein the module is adapted for communicating with the detector using the receiver.

77. The system of claim 75 or 76 wherein the long range communication network is a telephone network, a cellular telephone network, a radio network, a personal communication system network, or a two-way pager network.

5 78. A device comprising:

a processor adapted for coupling to a door opener and having programming including instructions for generating a command to operate the door opener;

10 a first position sensor coupled to the processor and adapted for generating a first position signal based on a position of a first door coupled to the door opener;

15 a radio frequency transceiver coupled to the processor and adapted for transmitting the first position signal using a long range communication protocol and a short range communication protocol, and for receiving a wireless signal using the long range communication protocol and the short range communication protocol, the transceiver including circuitry for spread spectrum frequency hopping and wherein the command is based on the wireless signal.

20 79. The device of claim 78 wherein the transceiver is adapted for communicating on a protocol compatible with a cellular telephone communication protocol.

25 80. The device of claim 78 or 79 wherein the transceiver is adapted for communicating on a protocol compatible with a pager communication protocol.

81. The device of any of claims 78 to 80 wherein the transceiver operates at a frequency of approximately 2.45 GHZ.

30 82. The device of any of claims 78 to 81 wherein the transceiver is substantially compatible with standards under IEEE 802.15 or substantially compatible with BLUETOOTH® technical specification version 1.0.

83. The device of any of claims 78 to 82 wherein the first position sensor includes a magnetic switch, a contact switch, or a camera.

5 84. The device of any of claims 78 to 83 further comprising a battery coupled to the processor and coupled to the transceiver.

85. The device of any of claims 78 to 84 further comprising an optical sensor coupled to the processor and adapted for generating a light level signal based on light intensity in a region proximate to the first door, and further wherein the
10 transceiver is adapted for transmitting the light level signal.

86. The device of any of claims 78 to 85 further comprising a second position sensor coupled to the processor and adapted for generating a second position signal based on a position of a second door, and further wherein the
15 transceiver is adapted for transmitting the second position signal.

87. The device of any of claims 78 to 86 wherein the processor includes programming having instructions for generating a web page accessible from the Internet.
20

88. The device of any of claims 78 to 87 further comprising an audio transducer coupled to the processor and further wherein the processor includes programming having instructions for operating the door opener in response to a vocal command received by the transducer.
25

89. A method of manufacturing a module comprising:
adapting a processor to couple with a door opener;
adapting the processor to couple with a first position sensor;
coupling a wireless transceiver adapted for spread spectrum frequency
30 hopping to the processor;

adapting the transceiver to receive a first signal in a protocol compatible with a long range communication protocol and in a protocol compatible with a short range communication protocol;

5 adapting the transceiver to transmit information received from the first position sensor in a protocol compatible with a long range communication protocol and in a protocol compatible with a short range communication protocol; and

10 providing a program for executing on the processor, the program having instructions to cause the processor to operate the door opener based on the first signal.

90. The method of claim 89 wherein adapting the transceiver to receive a first signal in a protocol compatible with a long range communication protocol includes adapting the transceiver to receive the first signal in a protocol
15 compatible with a long range cellular telephone communication protocol.

91. The method of claim 89 or 90 wherein adapting the transceiver to receive a first signal in a protocol compatible with a long range communication protocol includes adapting the transceiver to receive the first signal in a protocol
20 compatible with a pager communication protocol.

92. The method of any of claims 89 to 91 further comprising providing a battery connector coupled to the processor and to the transceiver.

25 93. The method of any of claims 89 to 92 further comprising adapting the processor to couple with a second position sensor and wherein the transceiver is adapted for transmitting information received from the second position sensor.

30 94. The method of any of claims 89 to 93 further comprising adapting the processor to couple with an optical sensor and wherein the transceiver is adapted for transmitting a light level signal based on light intensity in a region proximate to a door coupled to the door opener.

95. The method of any of claims 89 to 94 further comprising adapting the processor to generate a command to open a door coupled to the door opener in response to an open signal received by the transceiver in a protocol compatible with the long range communication protocol.

5

96. The method of any of claims 89 to 95 further comprising adapting the processor to generate a command to open a door coupled to the door opener in response to an open signal received by the transceiver in a protocol compatible with the short range communication protocol.

10

97. The method of any of claims 89 to 96 further comprising adapting the processor to generate a command to close a door coupled to the door opener in response to a close signal received by the transceiver in a protocol compatible with the long range communication protocol.

15

98. The method of any of claims 89 to 97 further comprising adapting the processor to generate a command to close a door coupled to the door opener in response to a close signal received by the transceiver in a protocol compatible with the short range communication protocol.

20

99. The method of any of claims 89 to 98 further comprising adapting the processor to generate a web page accessible from the Internet.

100. The method of any of claims 89 to 99 further comprising adapting the processor to couple with an audio transducer and to operate the door opener in response to a vocal command received by the transducer.

25

101. A method of operating a door comprising:
establishing a wireless communication channel with a module coupled to
the door;
transmitting a position signal on the channel based on a position of the
door;

30

providing an indication to a user based on the position signal; and
receiving an instruction signal on the channel, the instruction signal
based on a user selected option for operating the door.

- 5 102. The method of claim 101 wherein establishing a wireless communication
channel with a module coupled to the door includes communicating using a
protocol compatible with a cellular telephone, a protocol compatible with a
pager or a protocol compatible with BLUETOOTH® technical specification
version 1.0.

10

103. The method of claim 101 or 102 wherein providing an indication to a
user based on the position signal includes providing a visual indication.

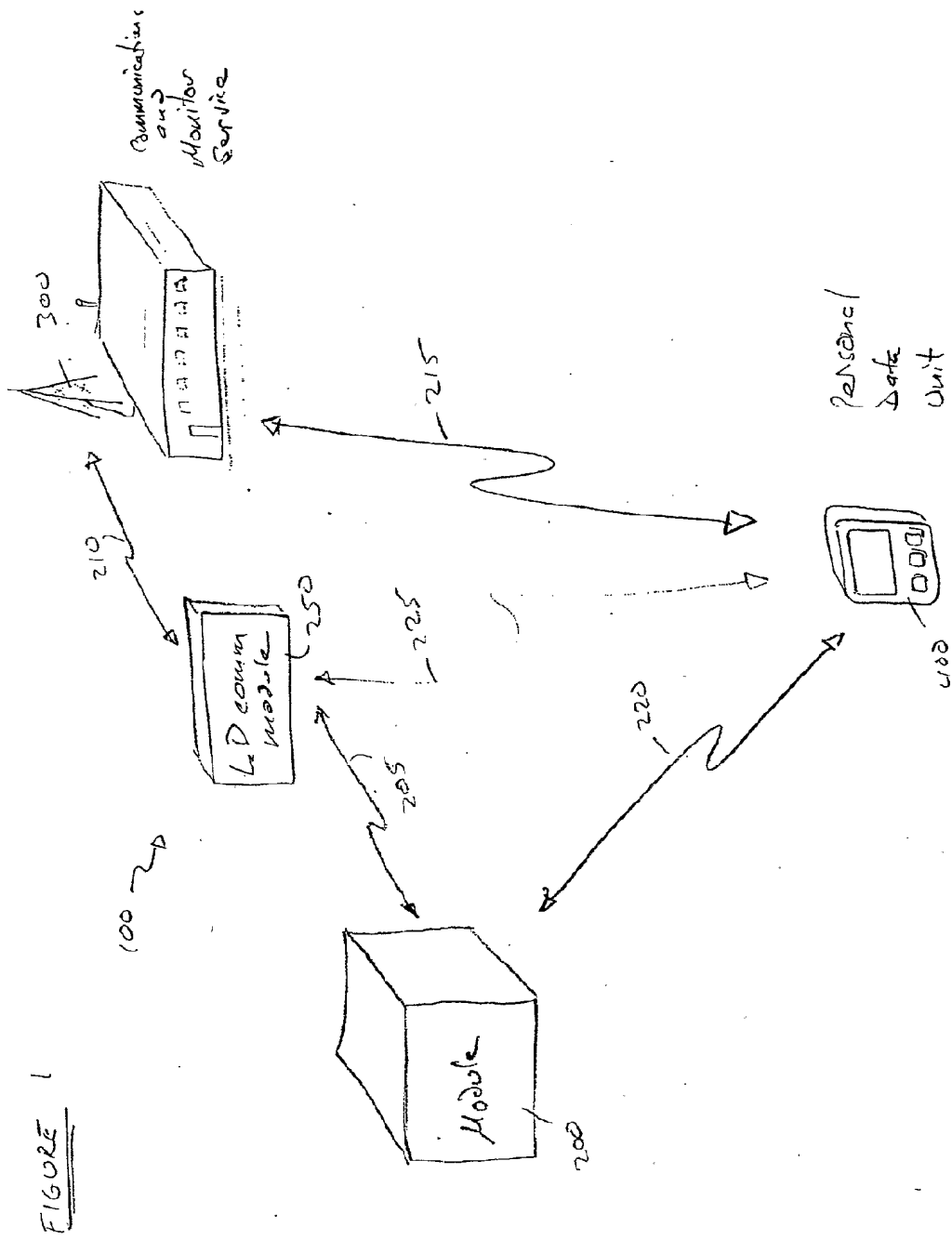


Figure 2A

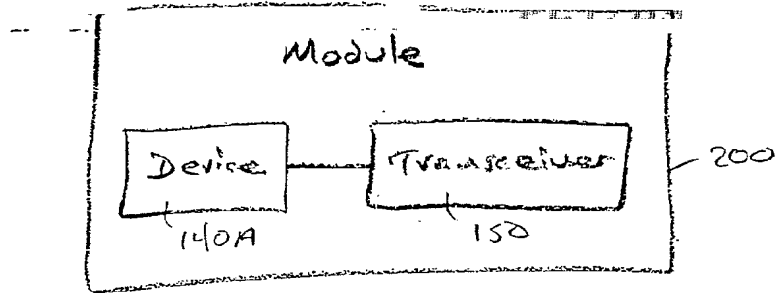


Figure 2B

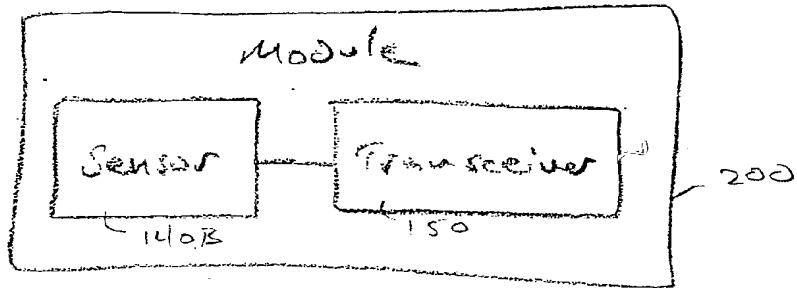


Figure 2C

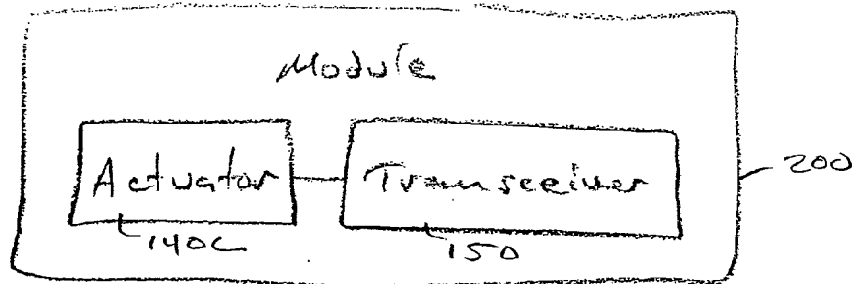


Figure 2D

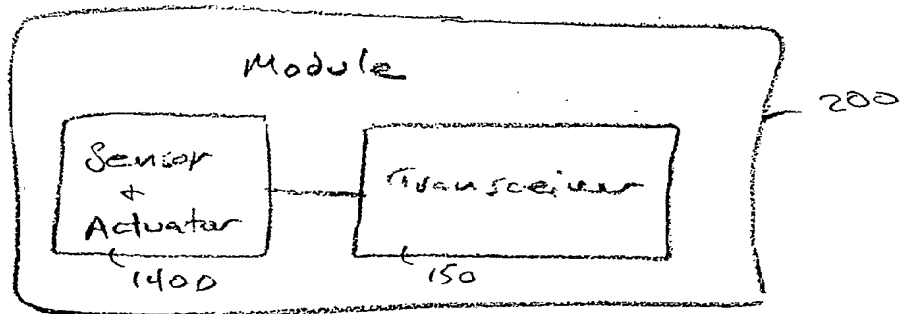


FIGURE 3A

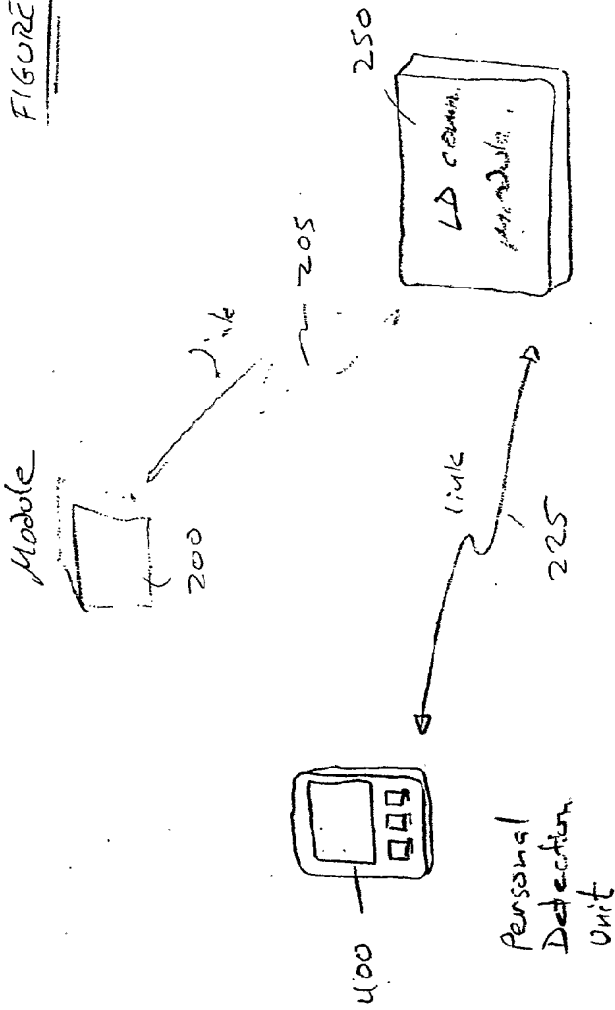
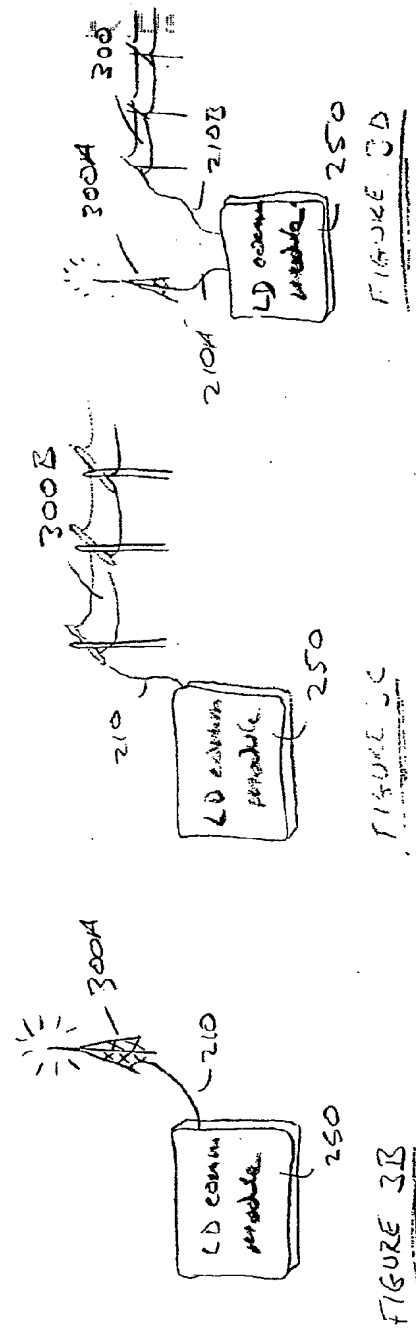


FIGURE 3D

FIGURE 3C

FIGURE 3B

FIGURE 4

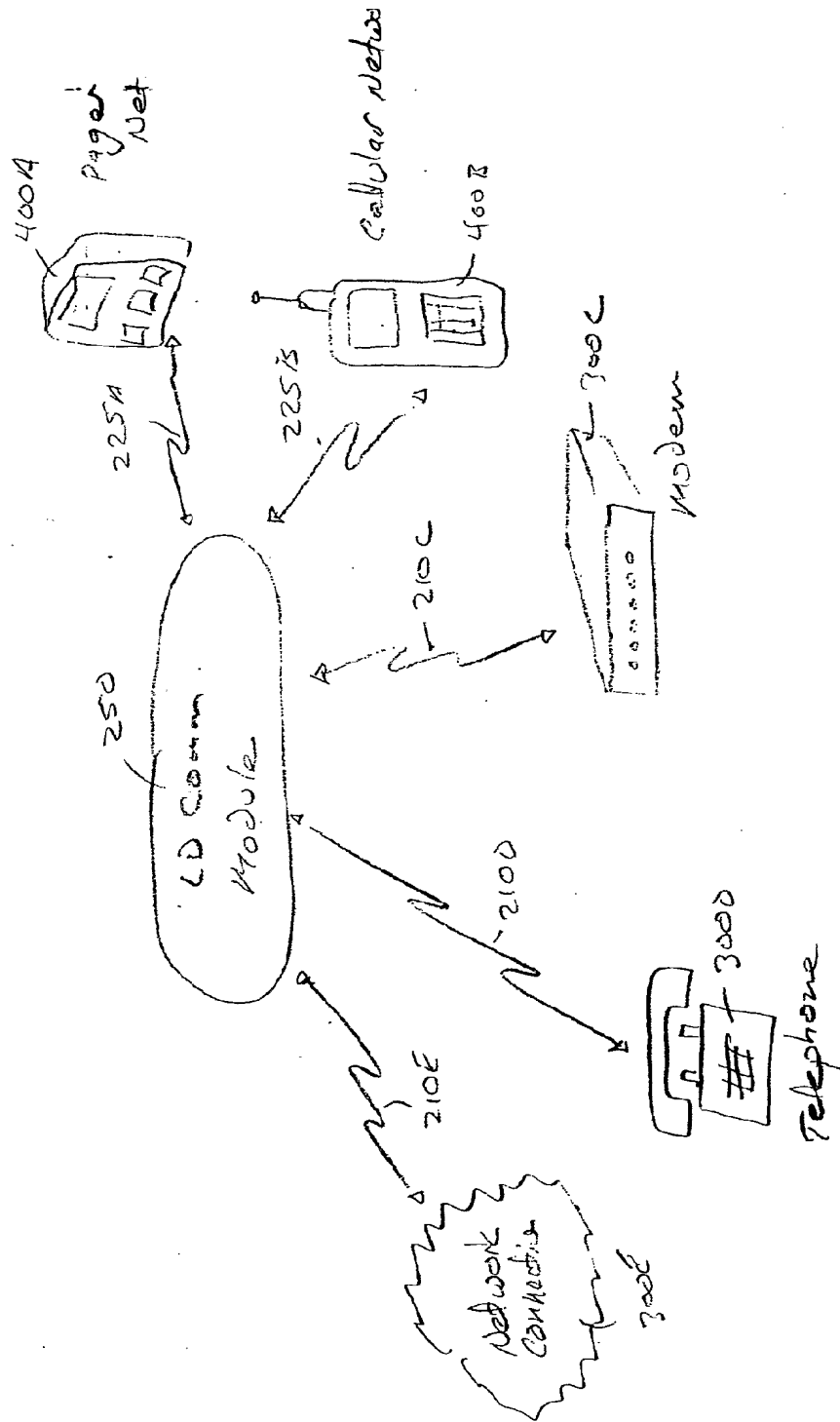
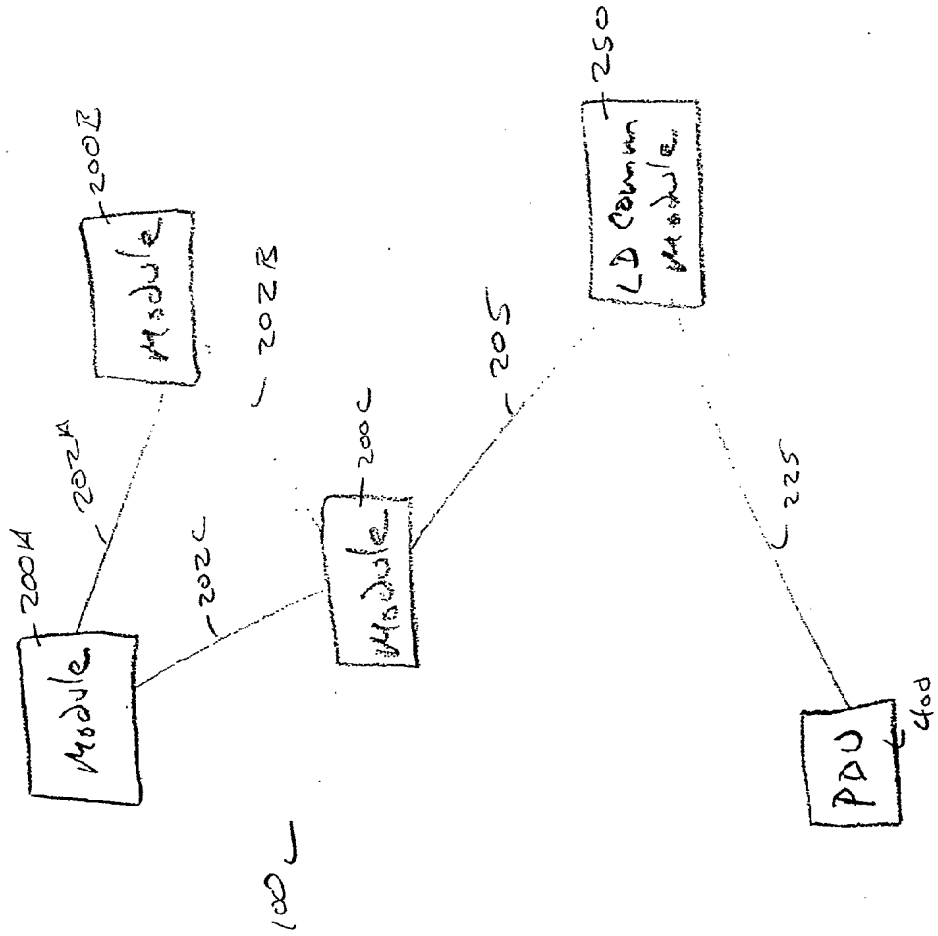
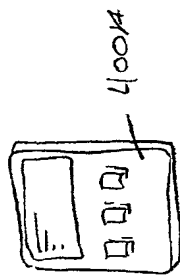


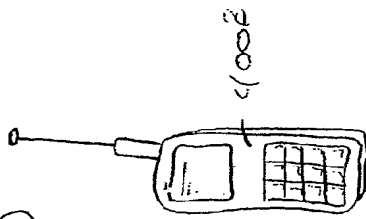
FIGURE 5



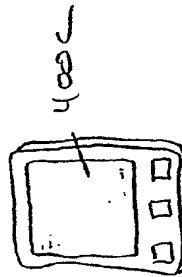
Personal Detection Unit
(Various Embodiments)



Two-Way Pager
FIGURE 6A



Cellular Telephone
FIGURE 6B



Personal Data Assistant
FIGURE 6C



Personal Communication Device
FIGURE 6D

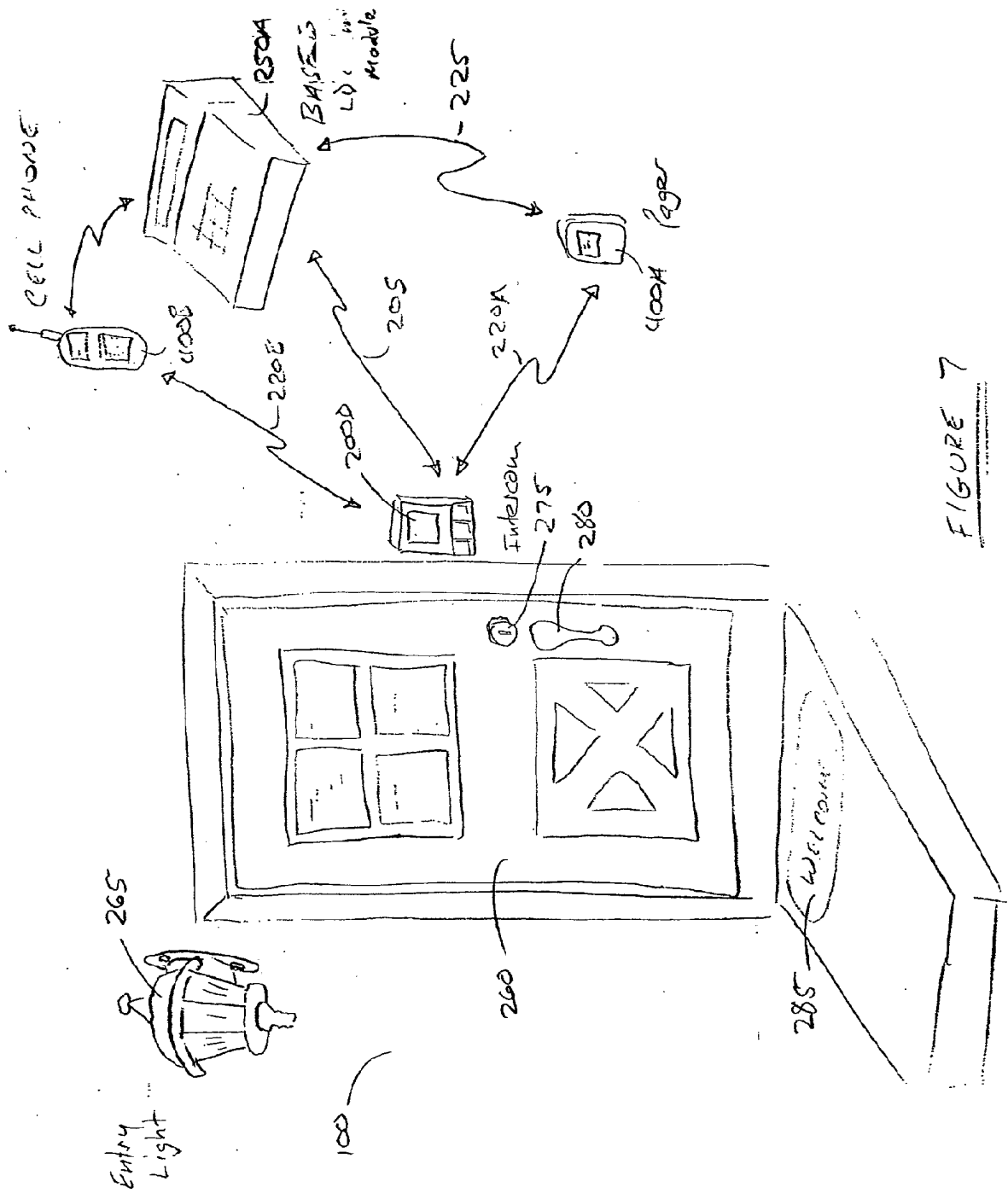


FIGURE 7

FIGURE 8

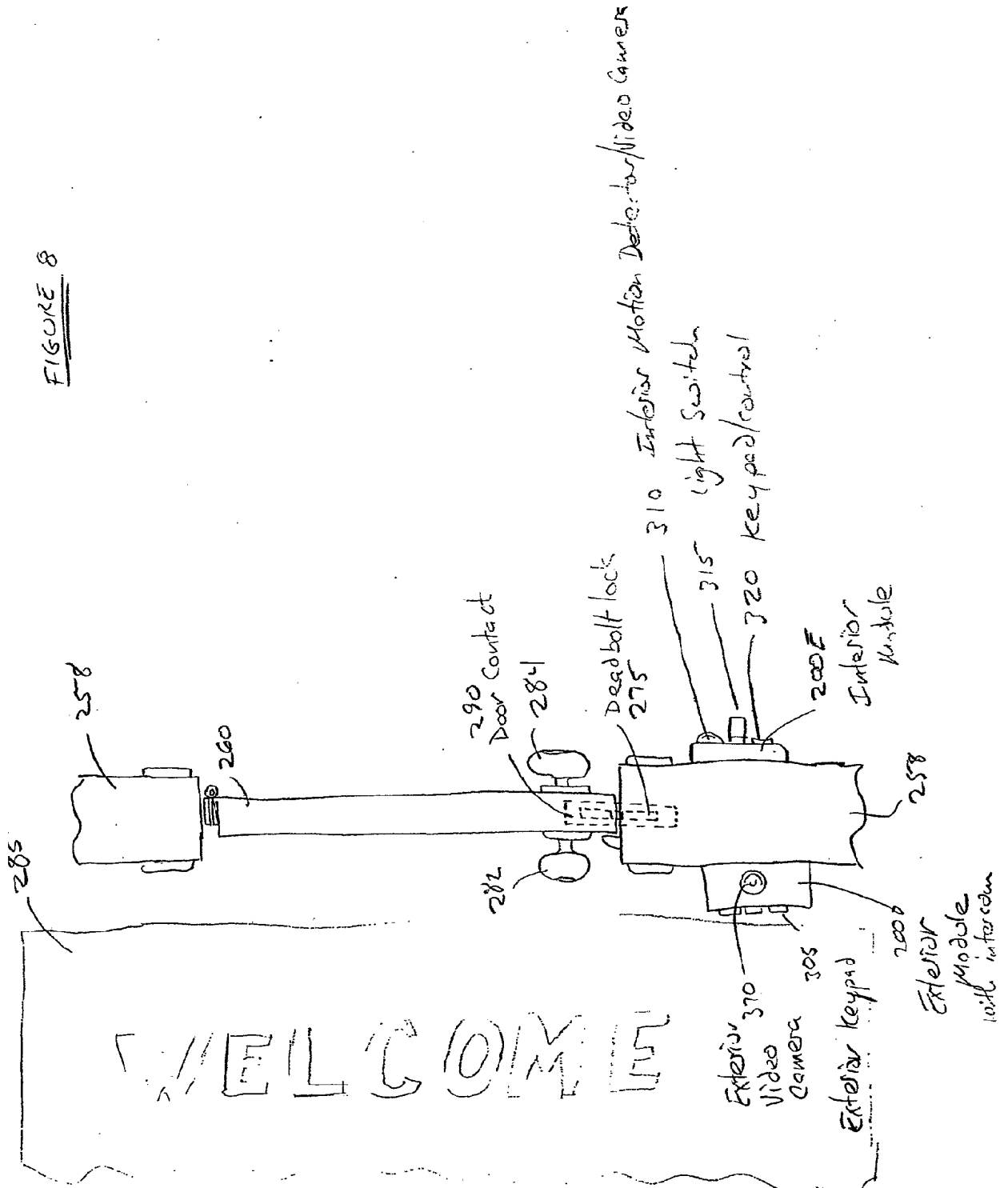


FIGURE 9

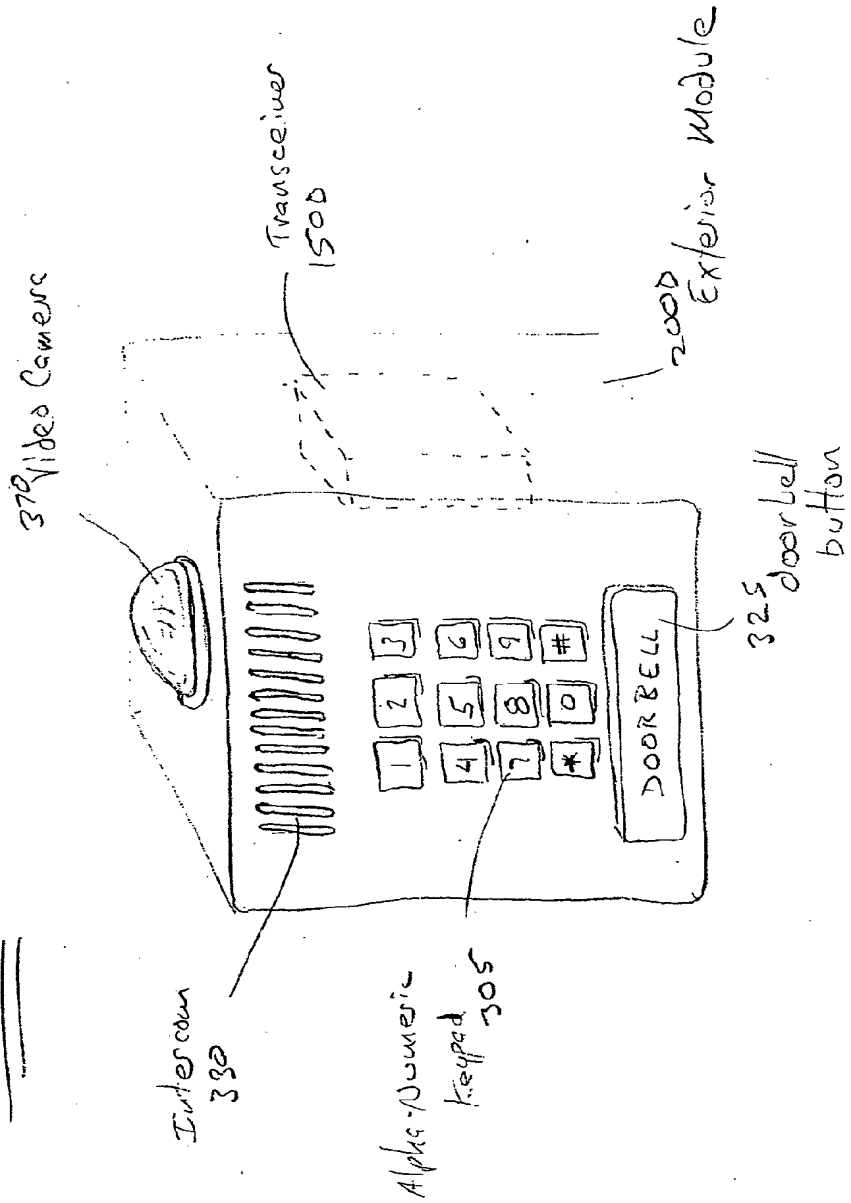


FIGURE 10

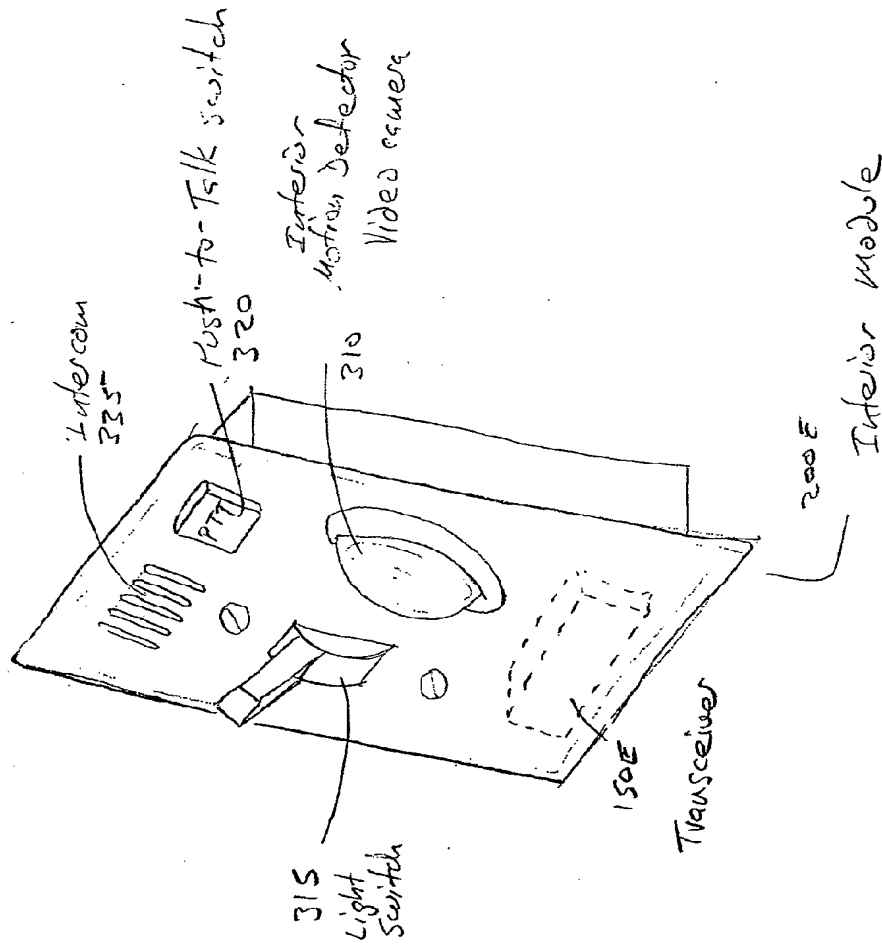


FIGURE 11

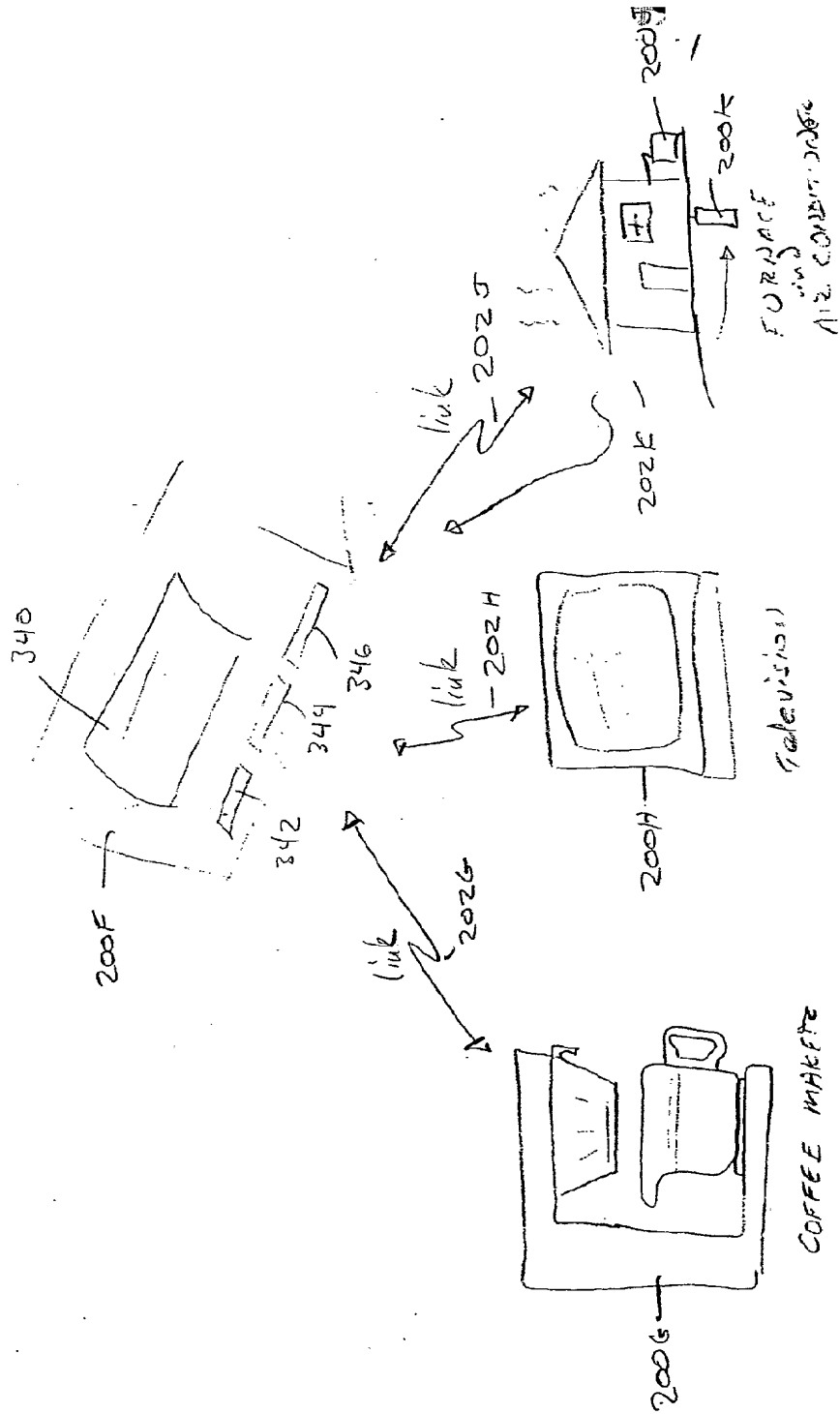
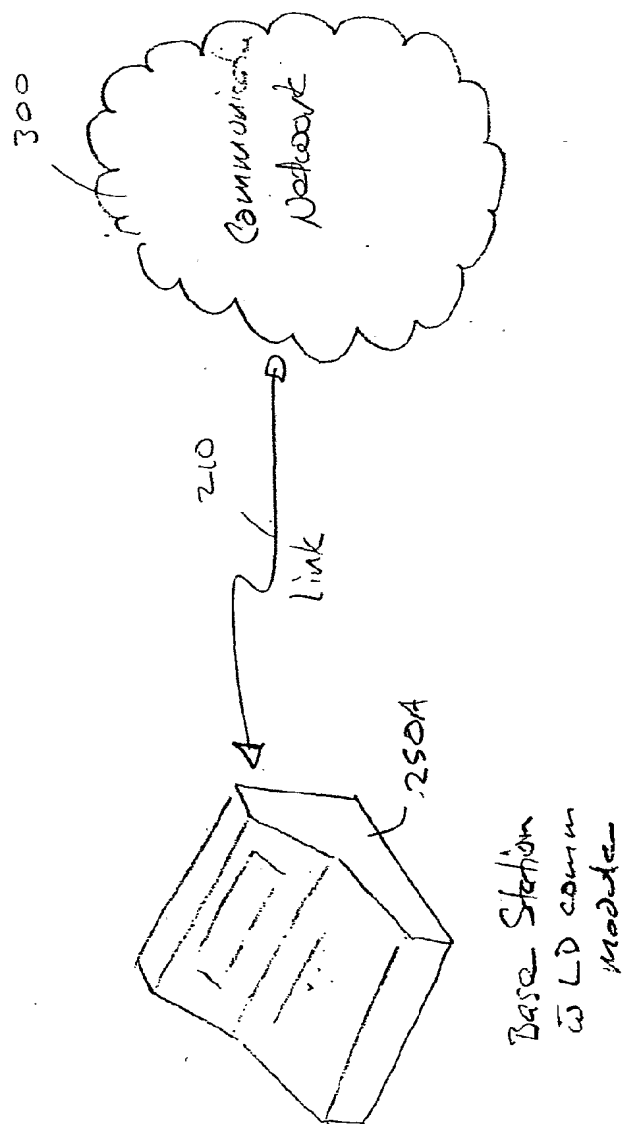


FIGURE 12



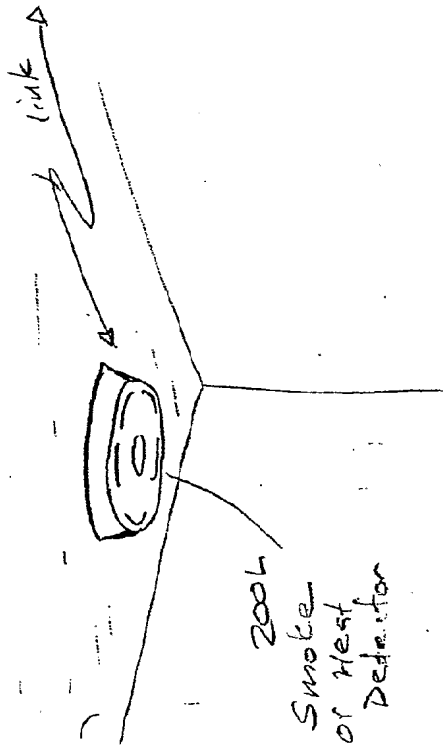


FIGURE 13

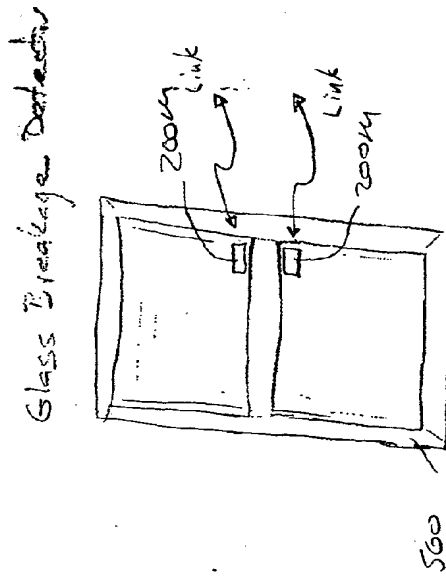
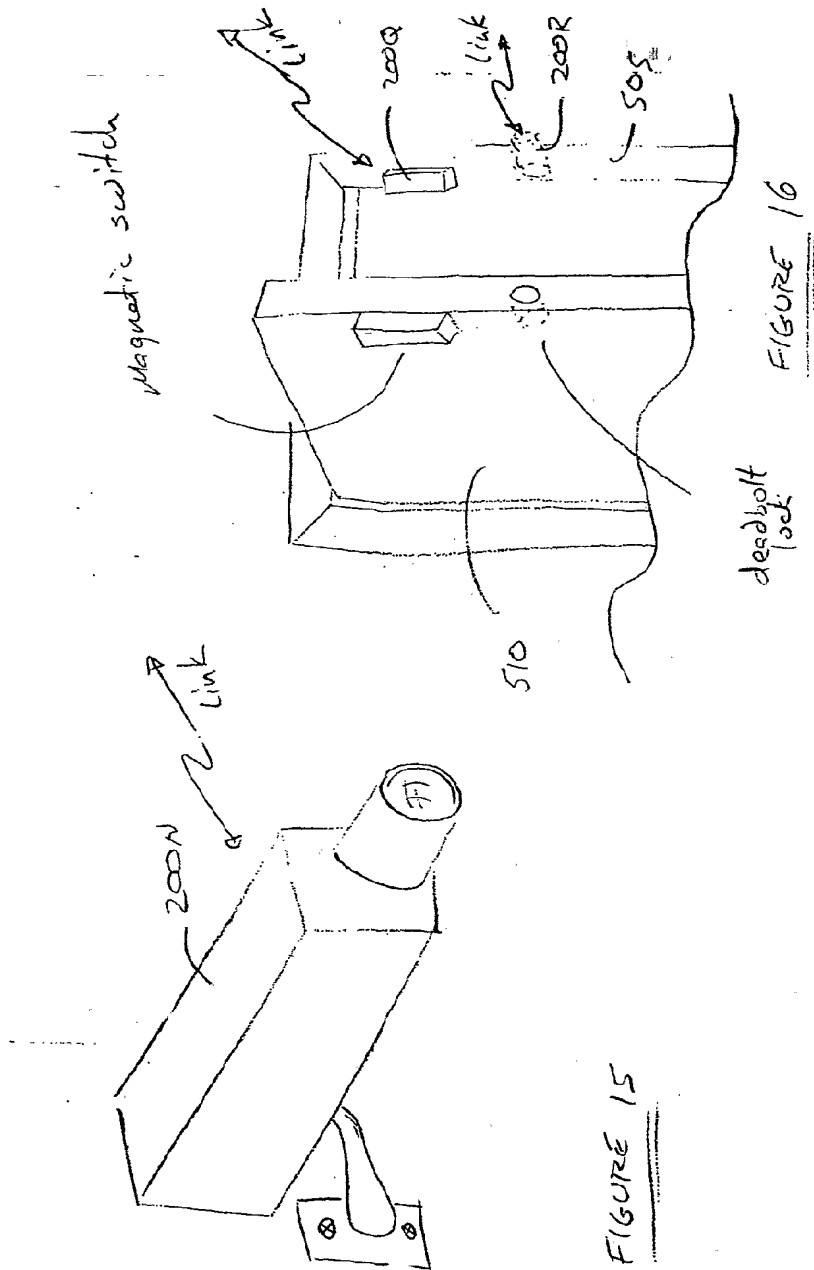


FIGURE 14



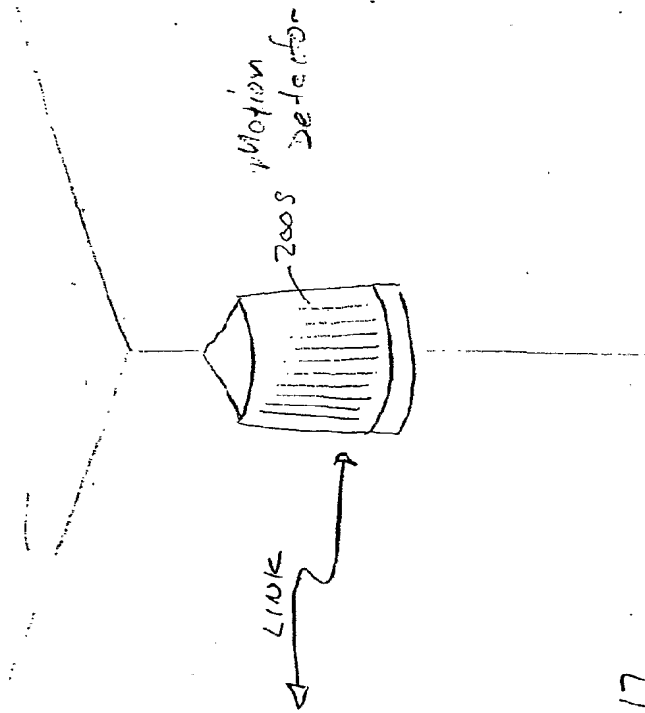


FIGURE 17

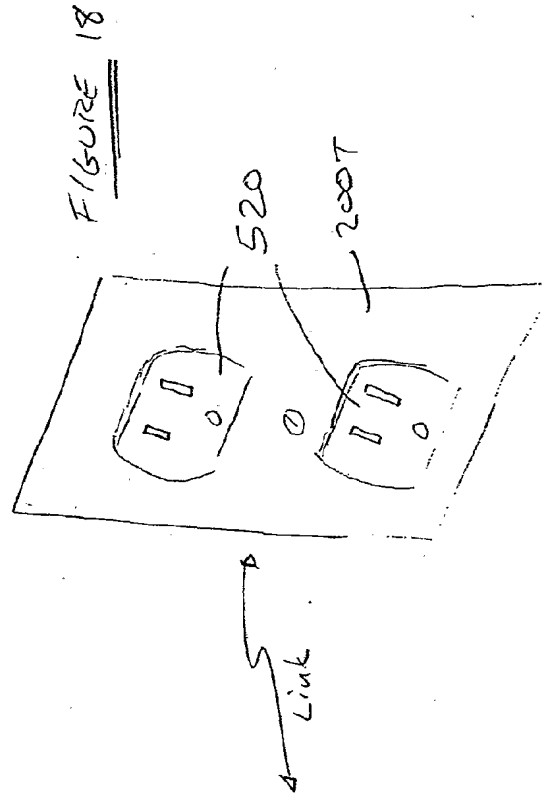


FIGURE 18

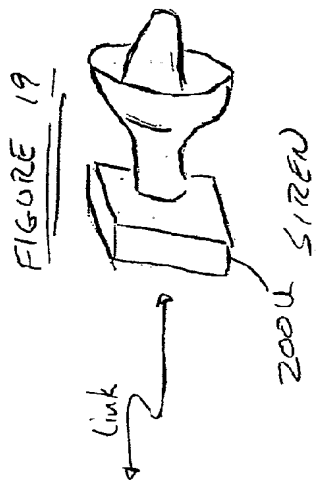
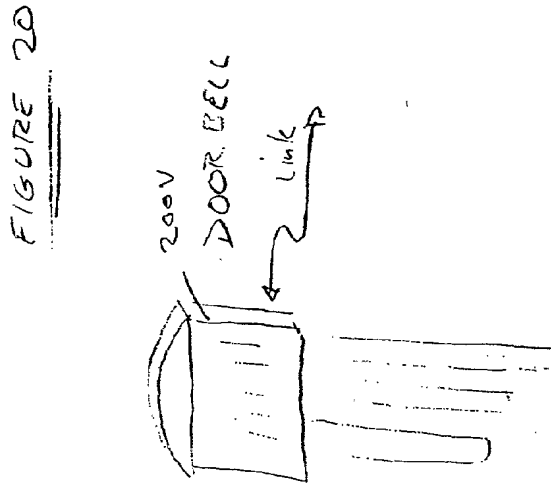
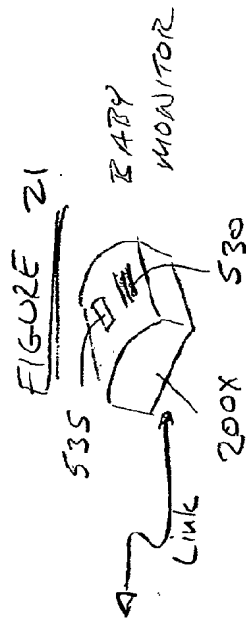
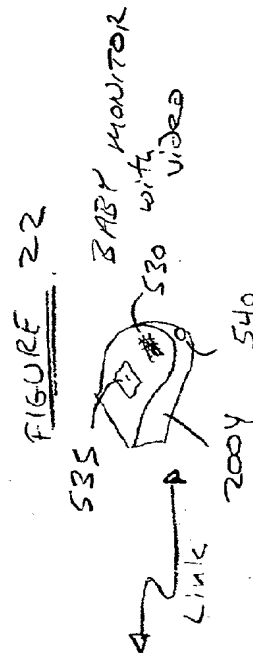


FIGURE 23

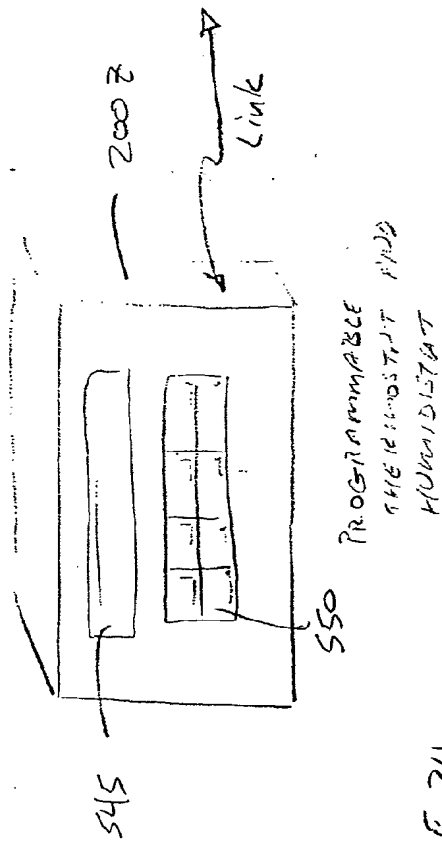


FIGURE 24

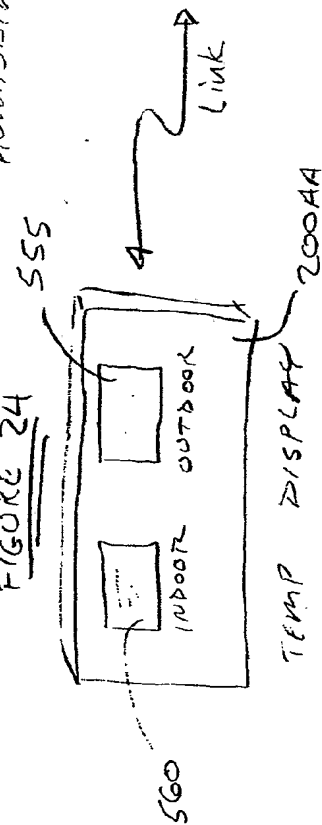
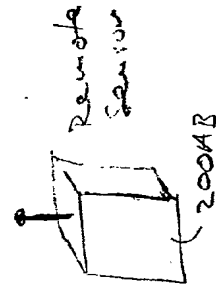


FIGURE 25

FIGURE 20

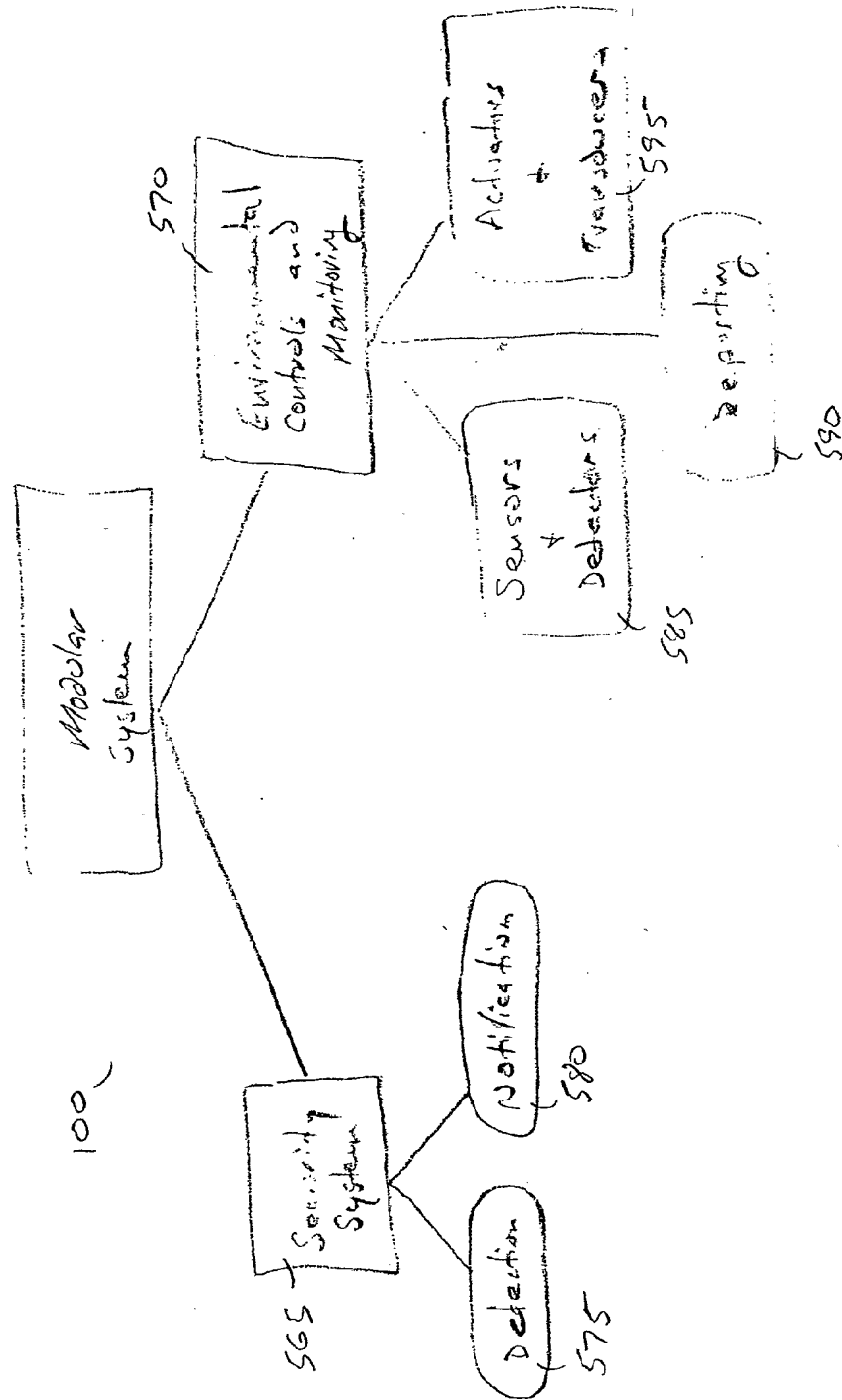
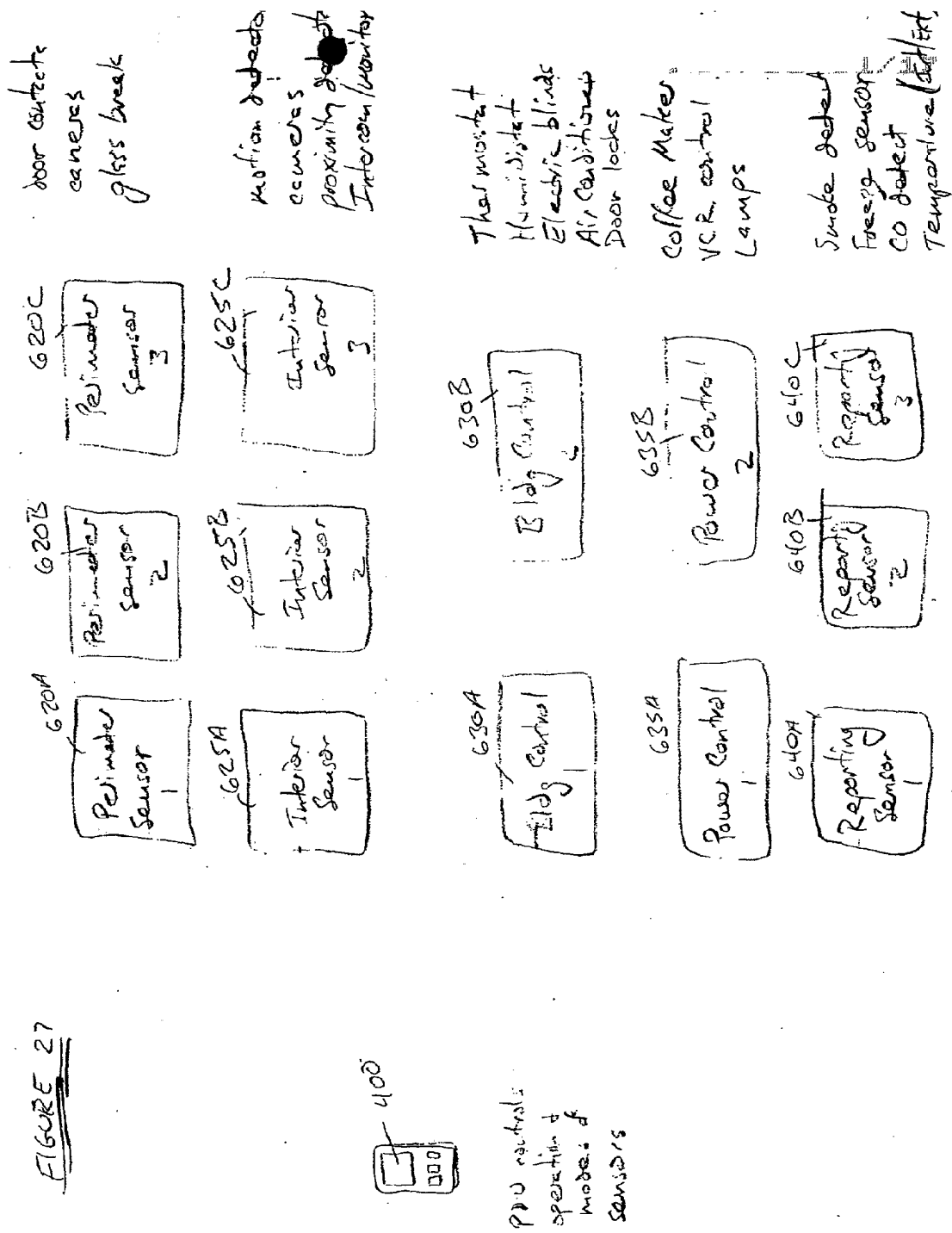


FIGURE 27



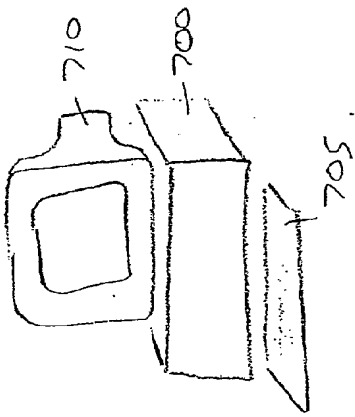


FIGURE 28

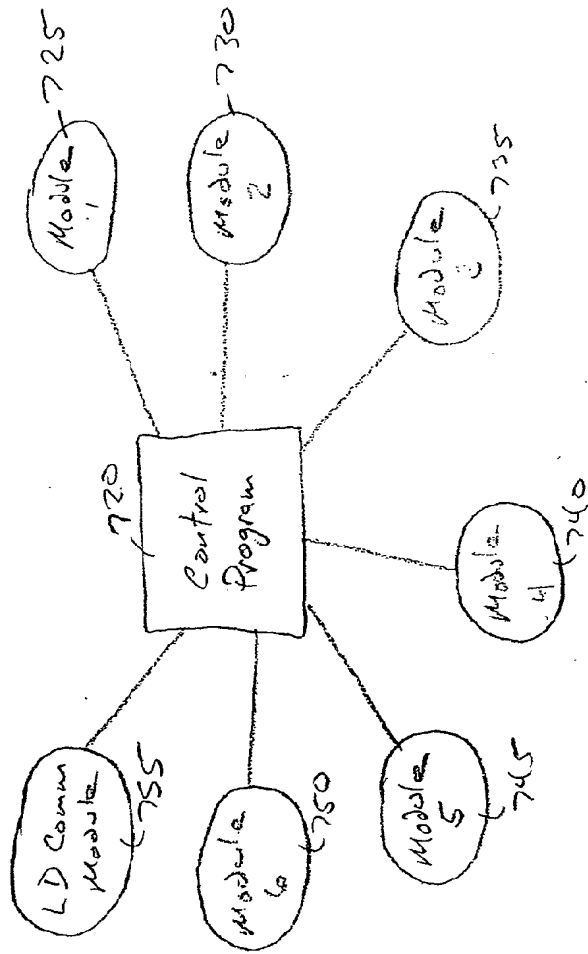
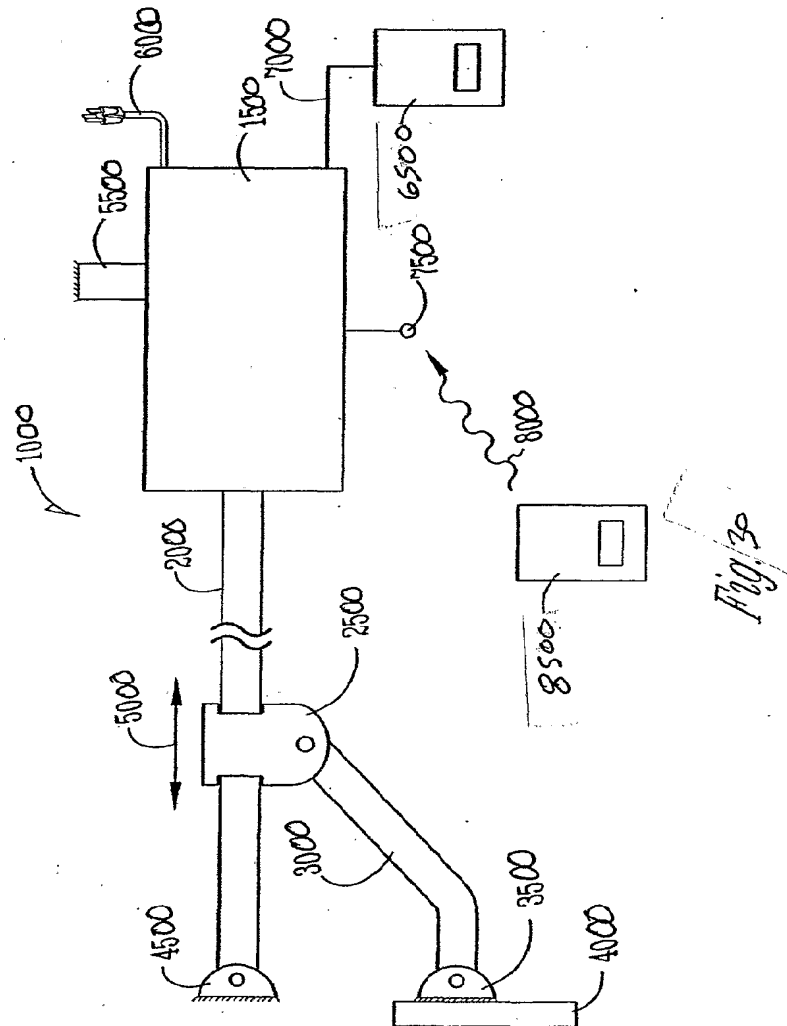


FIGURE 29



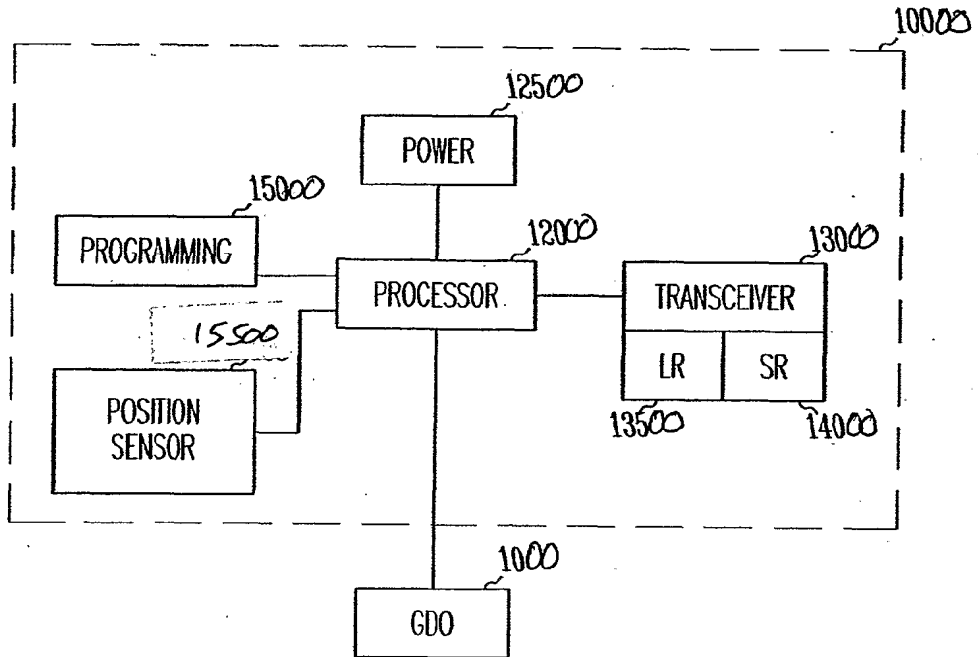


Fig. 31

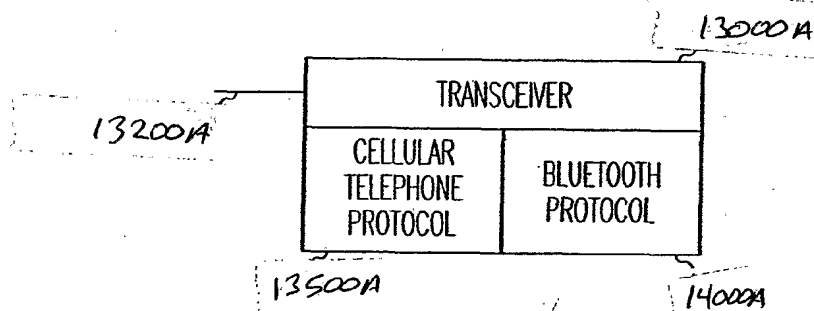


Fig. 32

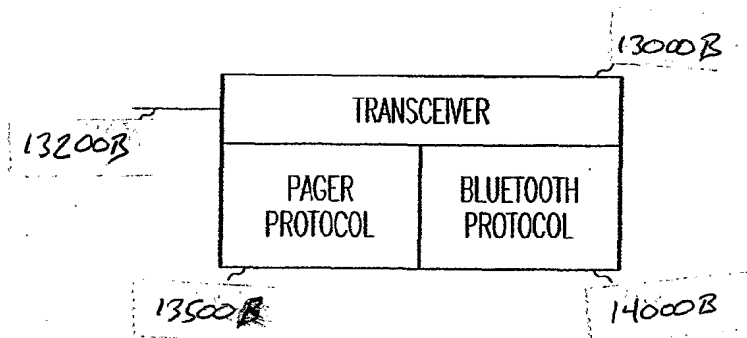


Fig. 33

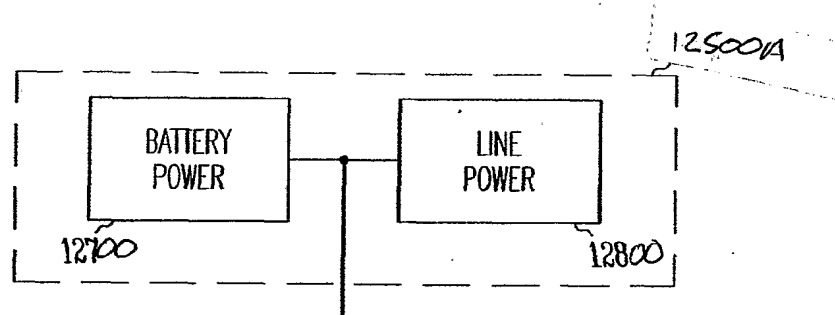


Fig. 34

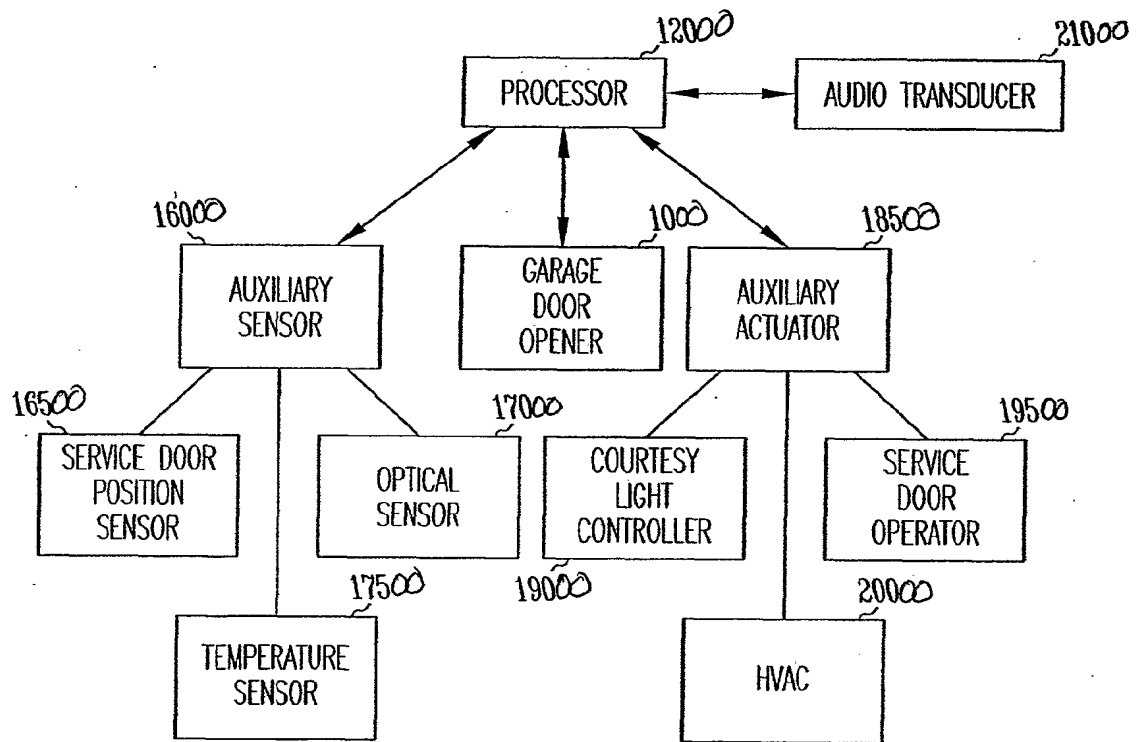
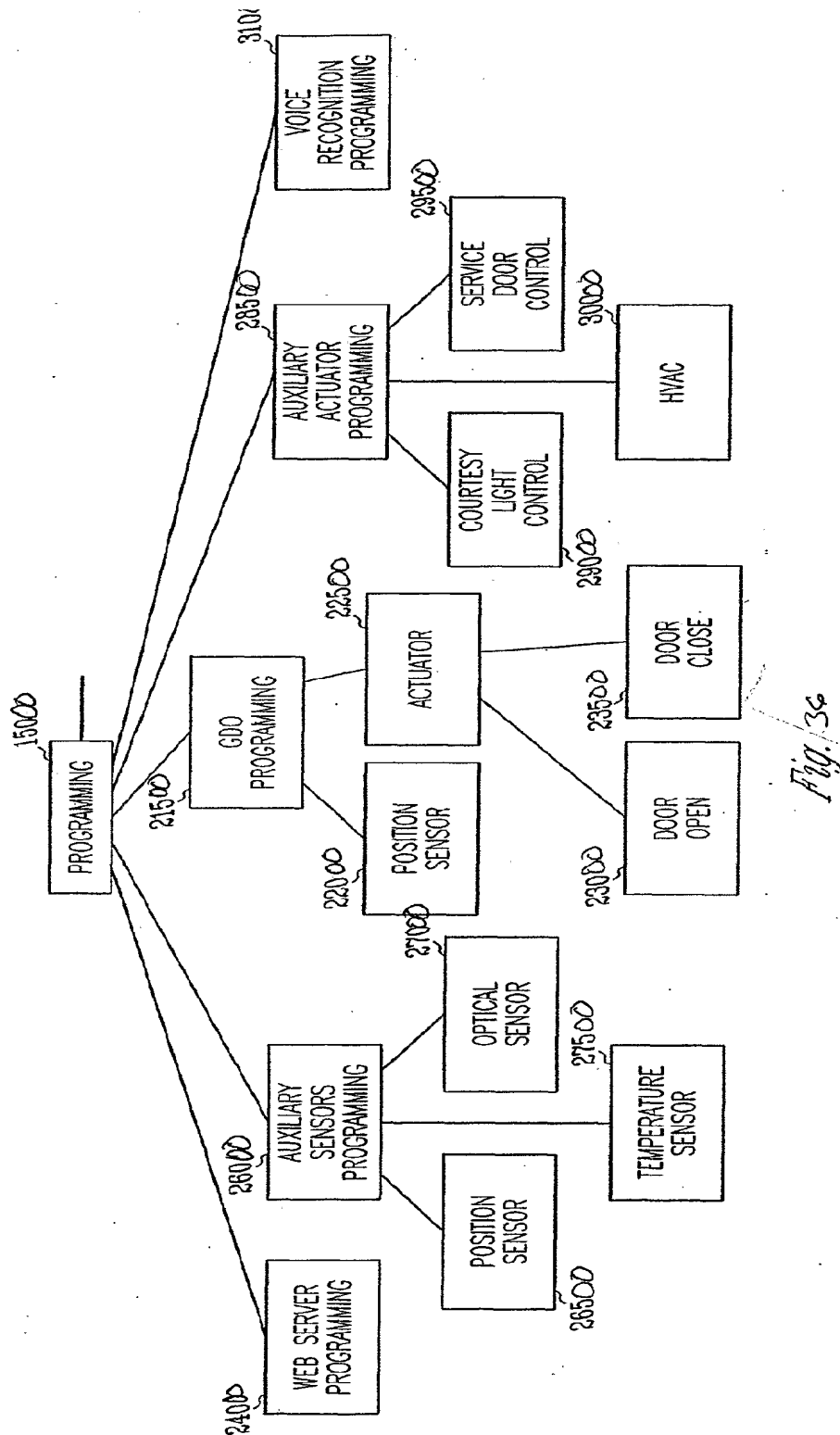
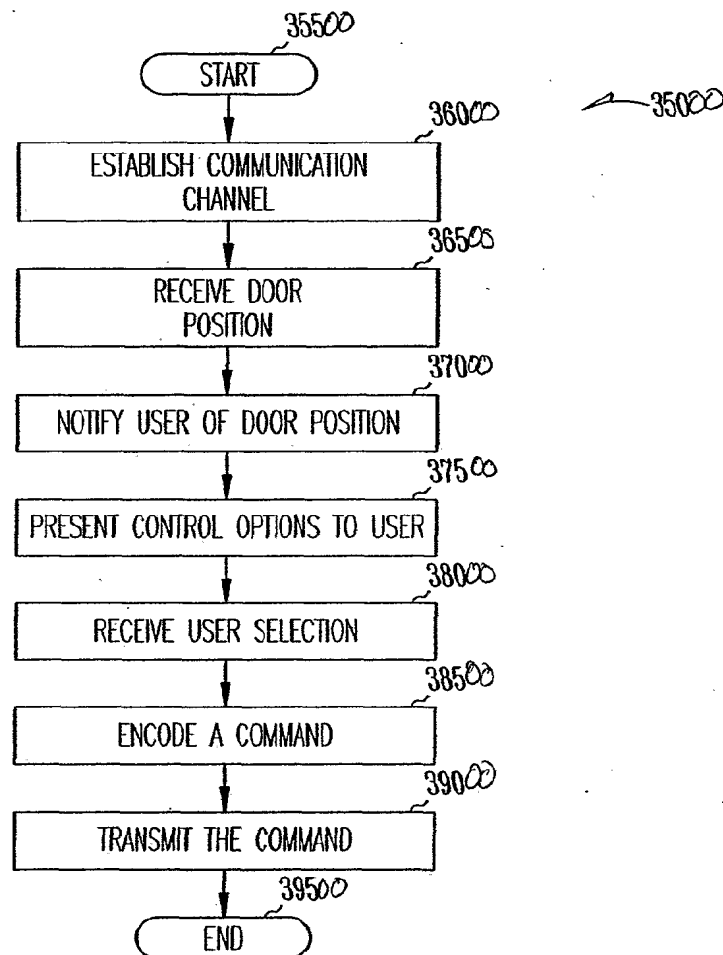


Fig. 35



*Fig. 37*

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/17300

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G08B 1/08

US CL :340/539,426,425.5,457,825.32,825.36,825.37,825.49

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 340/539,426,425.5,457,825.32,825.36,825.37,825.49

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,917,405 A (JOAO) 29 June 1999, abstract, lines 1-15	1-103

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

01 JULY 2001

Date of mailing of the international search report

30 OCT 2001

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Authorized officer

DARYL C. POPE

Telephone No. (703) 305-4838



US005428388A

United States Patent [19]

von Bauer et al.

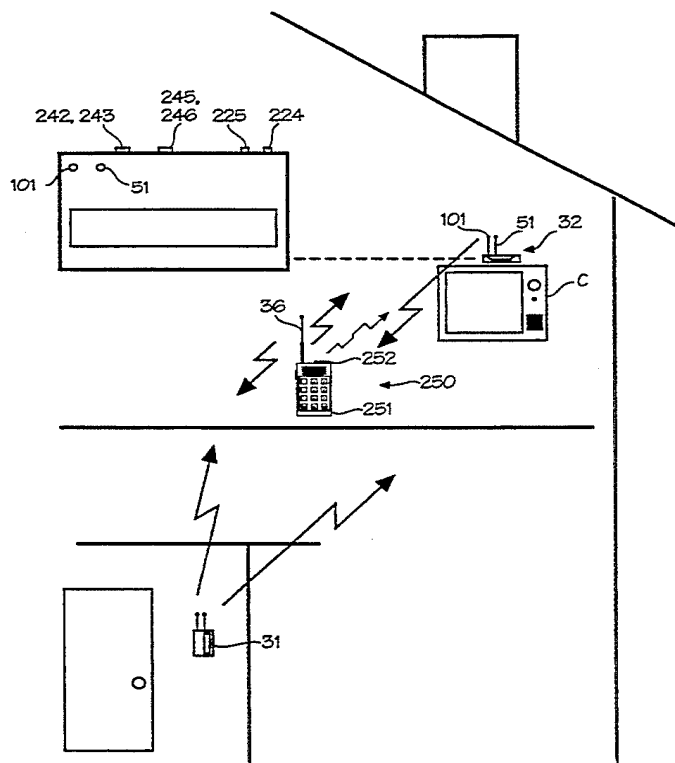
[11] **Patent Number:** 5,428,388[45] **Date of Patent:** Jun. 27, 1995[54] **VIDEO DOORBELL SYSTEM**[75] Inventors: **Richard P. von Bauer**, Yorba Linda, Calif.; **Douglas W. Eberlen**, Pasadena, Calif.[73] Assignee: **Richard von Bauer**, Anaheim Hills, Calif.[21] Appl. No.: **898,713**[22] Filed: **Jun. 15, 1992**[51] Int. Cl.⁶ **H04N 7/18**[52] U.S. Cl. **348/155; 348/156; 379/56; 379/58; 379/103; 379/176; 455/66**[58] Field of Search **358/108; 379/53, 56, 379/58, 103, 167, 176; 455/66; H04N 7/18; 348/156, 155**[56] **References Cited****U.S. PATENT DOCUMENTS**

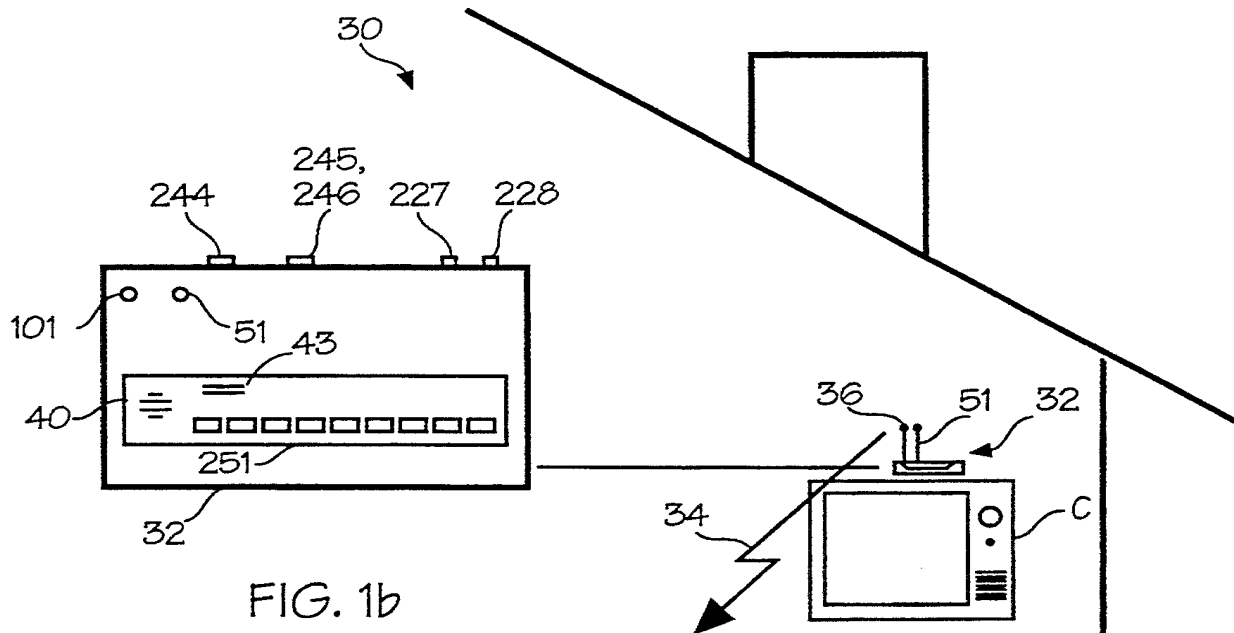
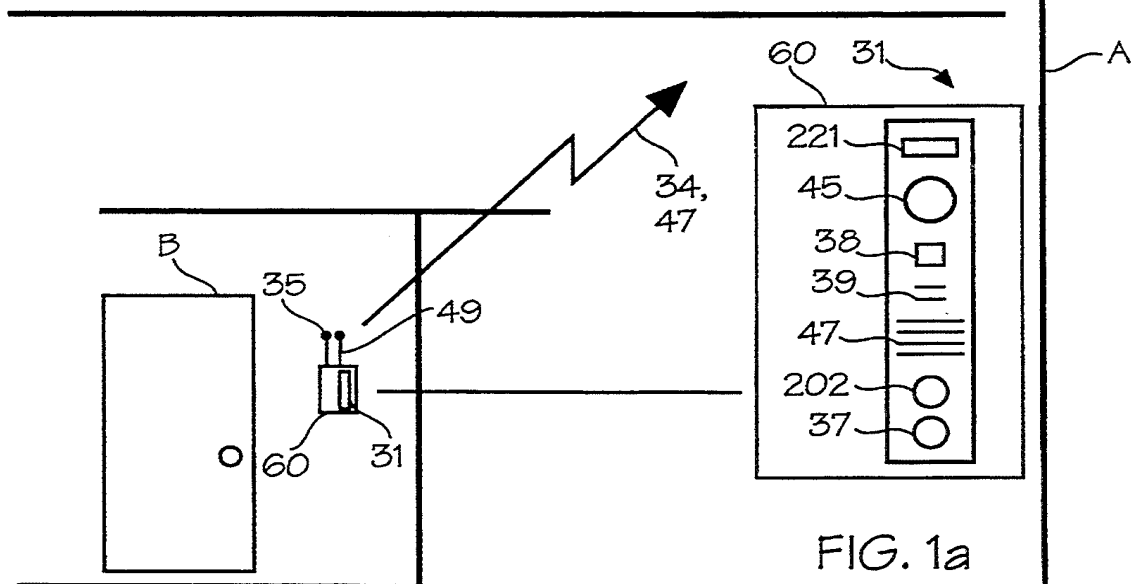
4,370,675	1/1983	Cohn	358/108
4,631,365	12/1986	Potter	379/167
4,715,060	12/1987	Lipscher	379/70
4,731,821	3/1988	Jackson	379/103
4,764,953	8/1988	Chern	379/103
4,959,713	9/1990	Morotomi	358/108
5,079,634	1/1992	Hosono	358/108
5,280,266	1/1994	Kao	358/108

Primary Examiner—Howard W. Britton*Attorney, Agent, or Firm*—William L. Chapin[57] **ABSTRACT**

A communication apparatus for monitoring sounds and

images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building. A microphone and television camera in the sensor station modulate signals, preferably of radio frequency, emitted by a wireless transmitter in the sensor station. The monitor station includes a transmitter and demodulator for reproducing sounds and visual images received by the sensor station. Preferably, the monitor station contains a microphone and transmitter for transmitting voice signals from the monitor station to the sensor station, in which case, the sensor station contains a receiver and loudspeaker for reproducing the voice signals. The preferred embodiment of the sensor station includes an internal battery rechargeable by being connected across the terminals of an existing doorbell button, the charging current being limited to a value which insures that a doorbell connected to the button will not be activated unless the button is depressed. Logic circuitry within the sensor station activates the sensor transmitter, and sends an annunciator signal to the monitor station when the doorbell button is pressed. Also in the preferred embodiment, activation of the sensor station and transmission of an annunciator signal may be initiated by the presence of a human being in the location of a sensor, such as an infrared sensor, in the sensor station.

27 Claims, 14 Drawing Sheets



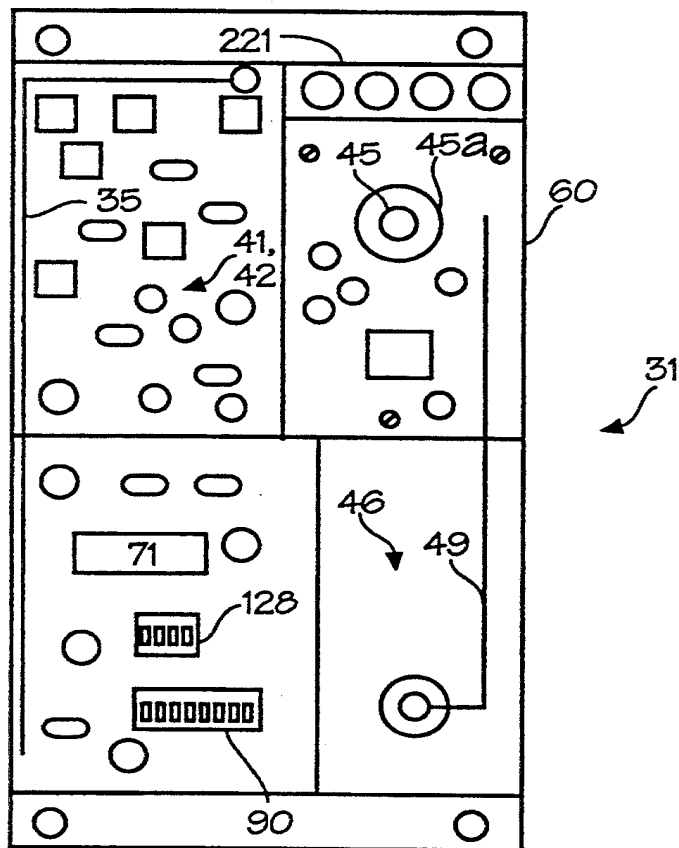
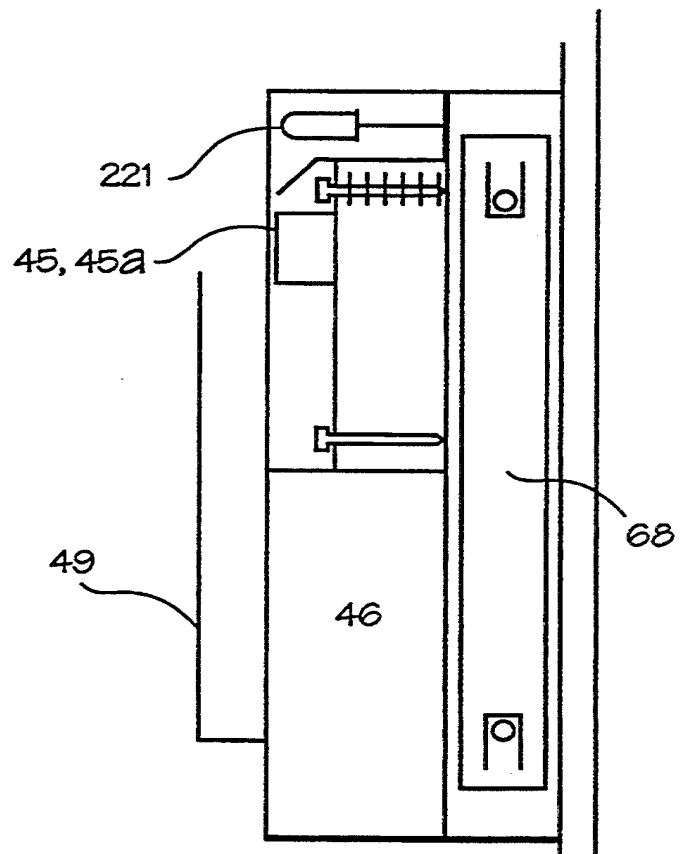


FIG. 2

FIG. 3



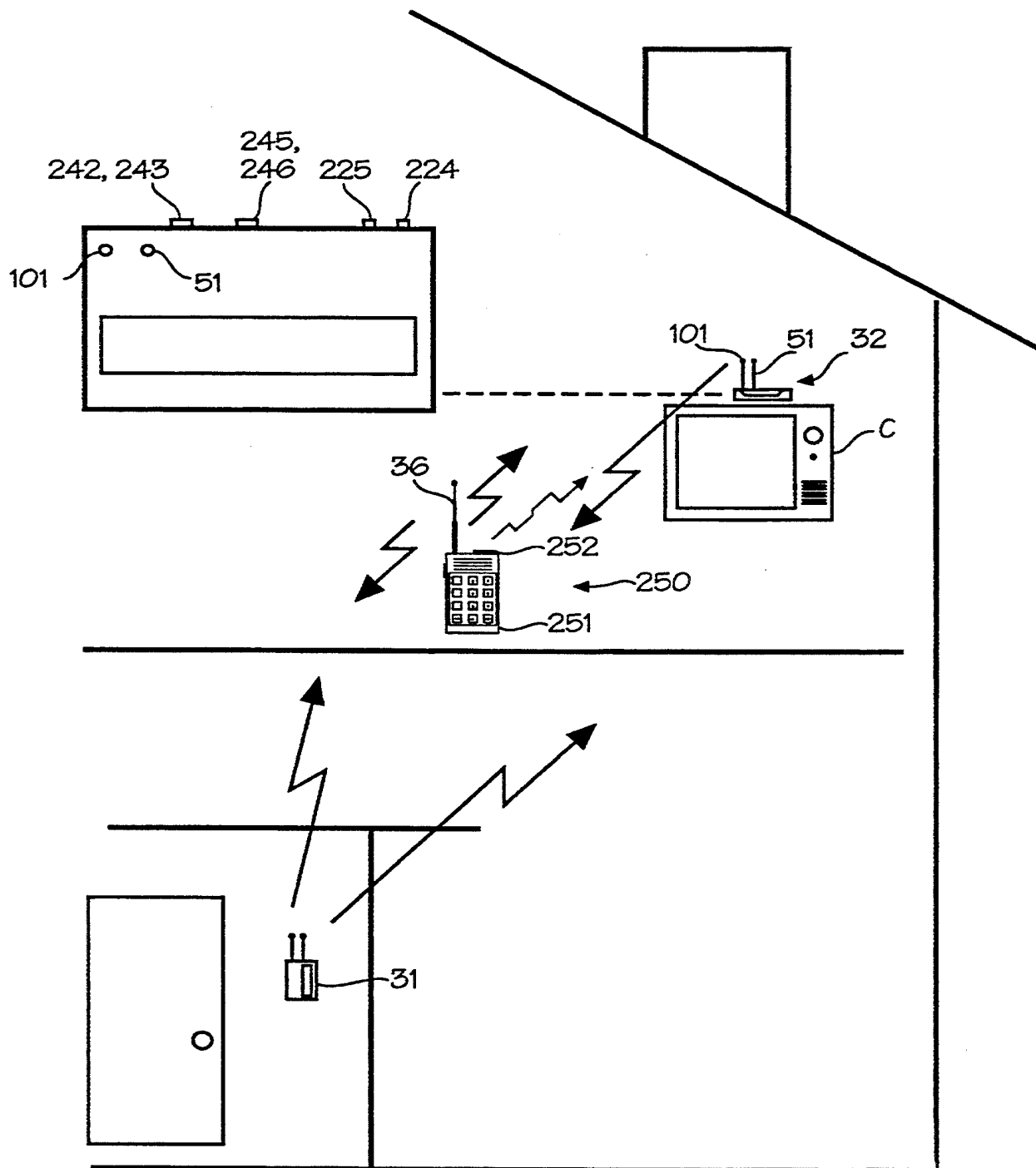


FIG. 4

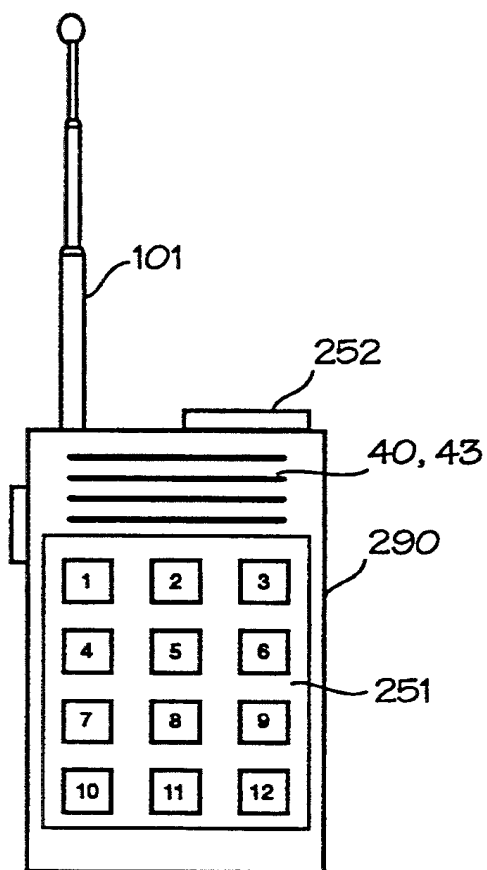


FIG. 5

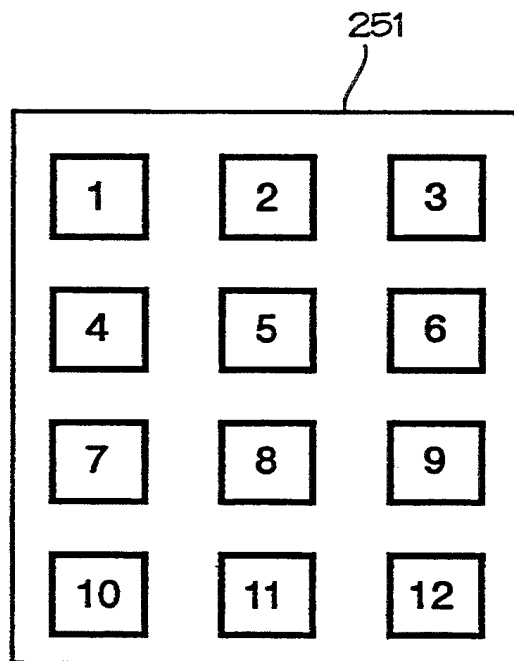


FIG. 6

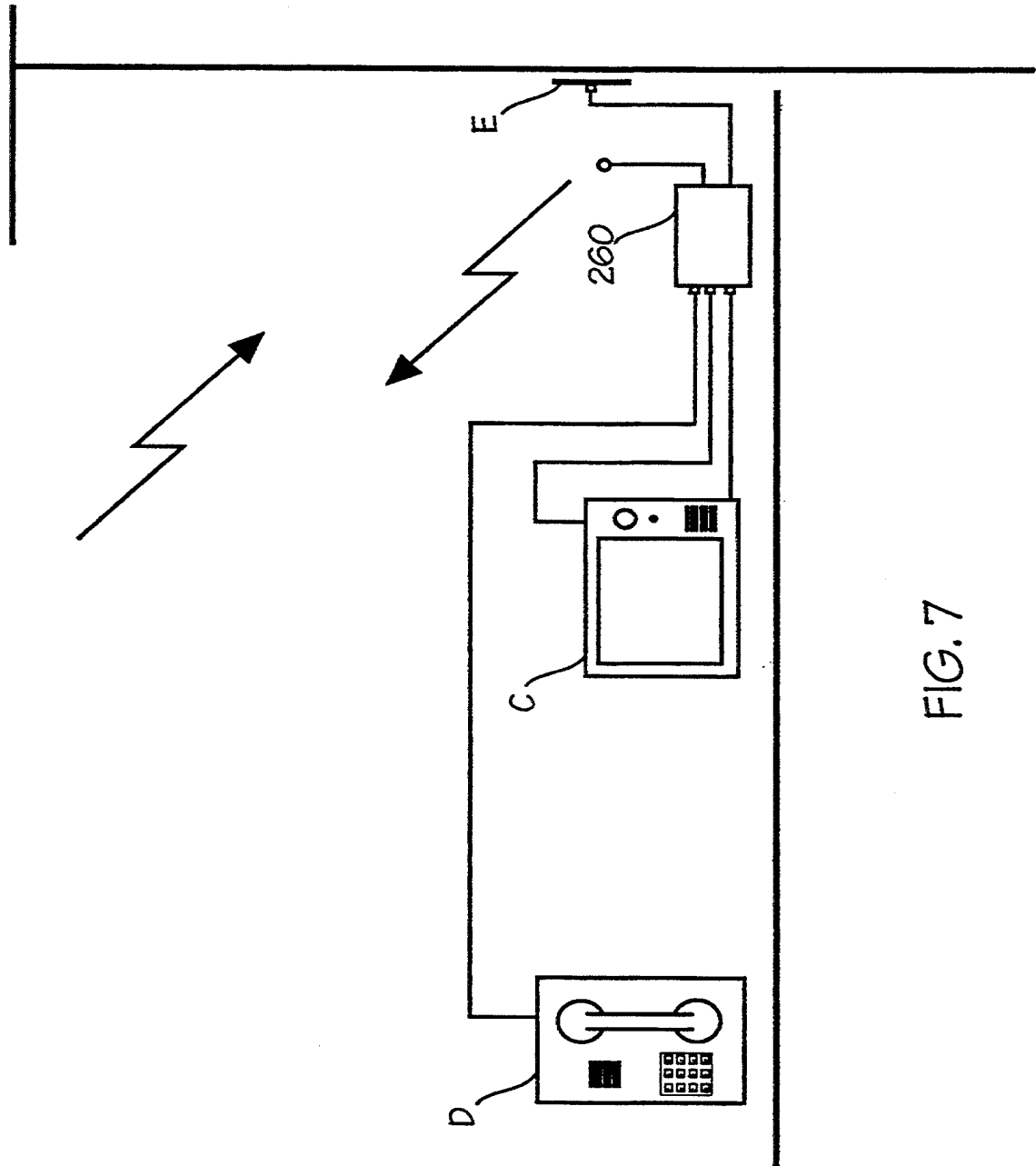


FIG. 7

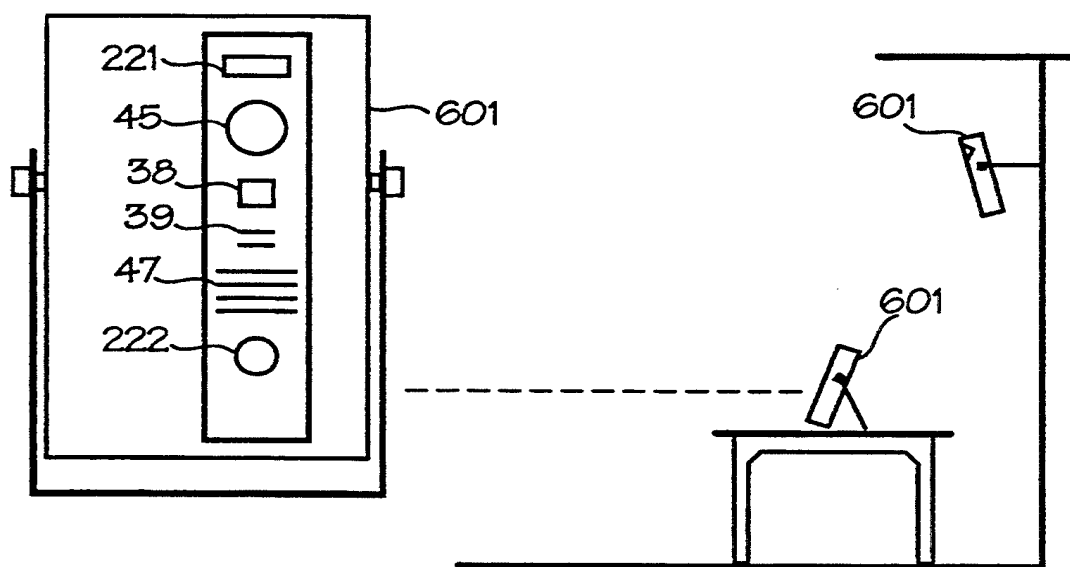


FIG. 8

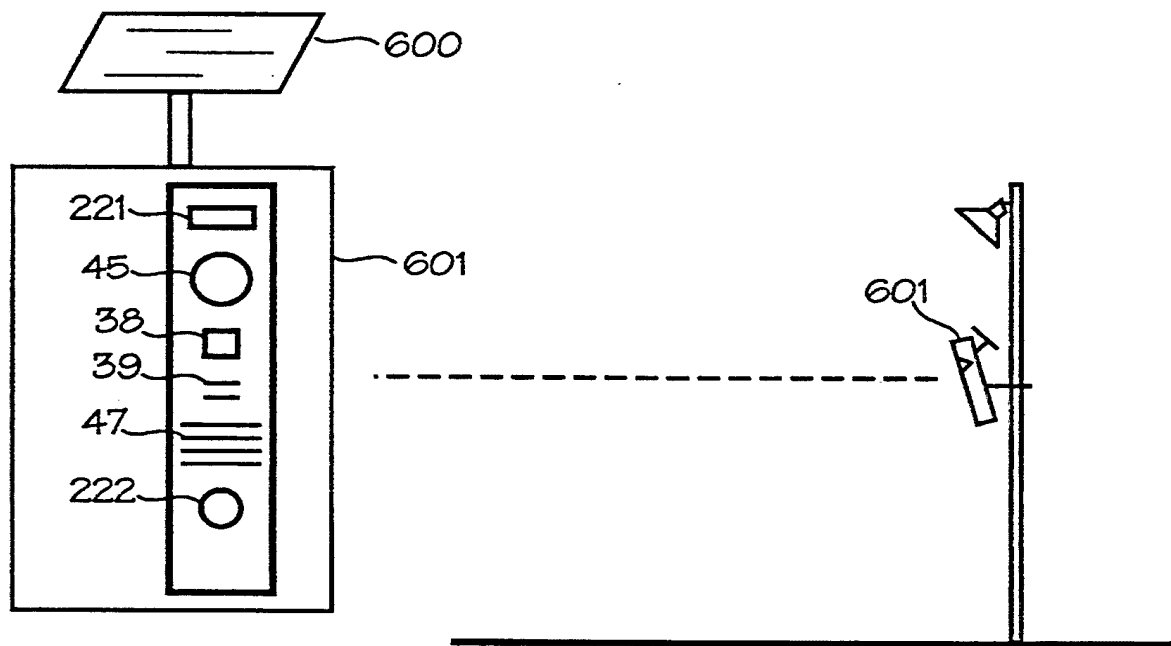


FIG. 9

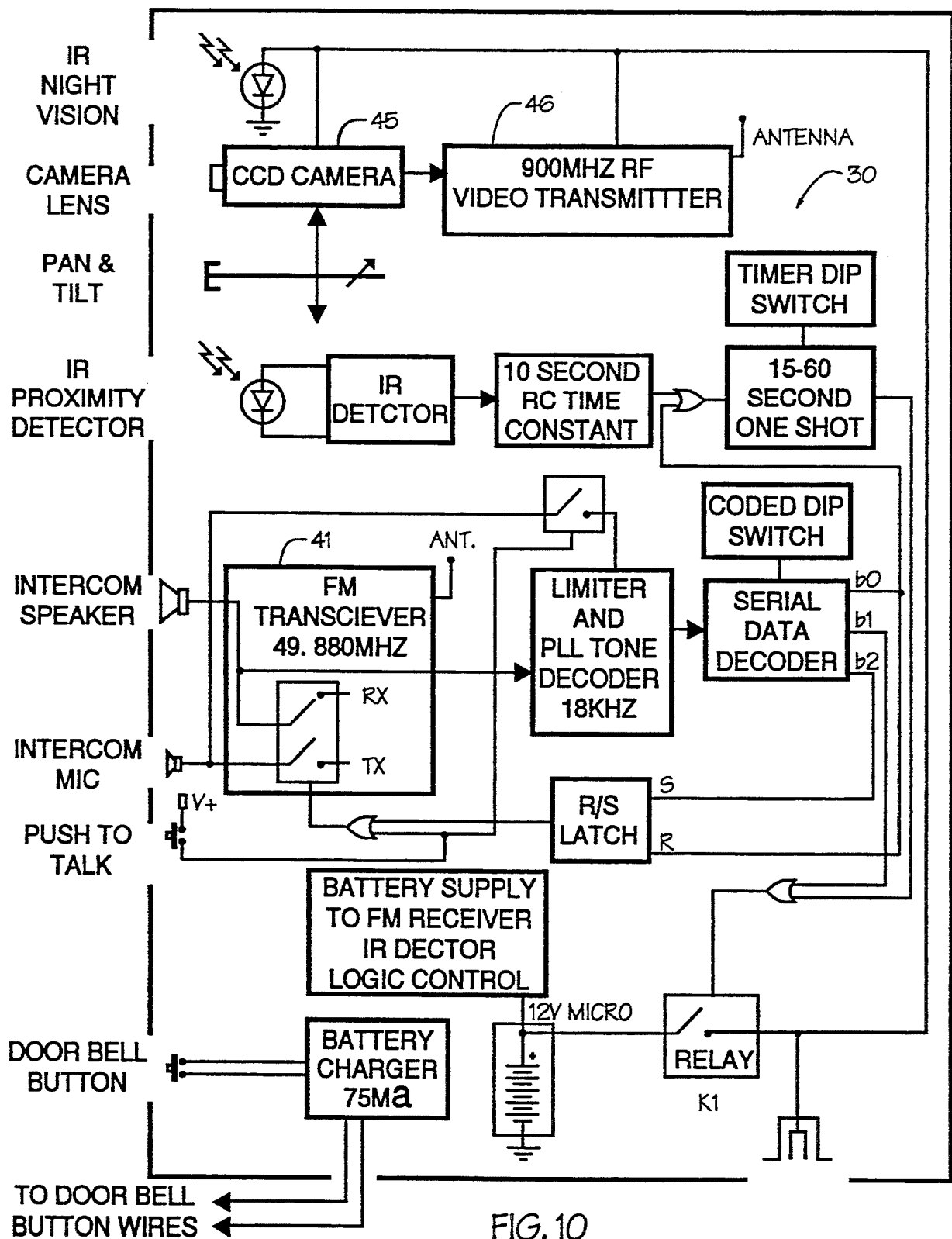


FIG. 10

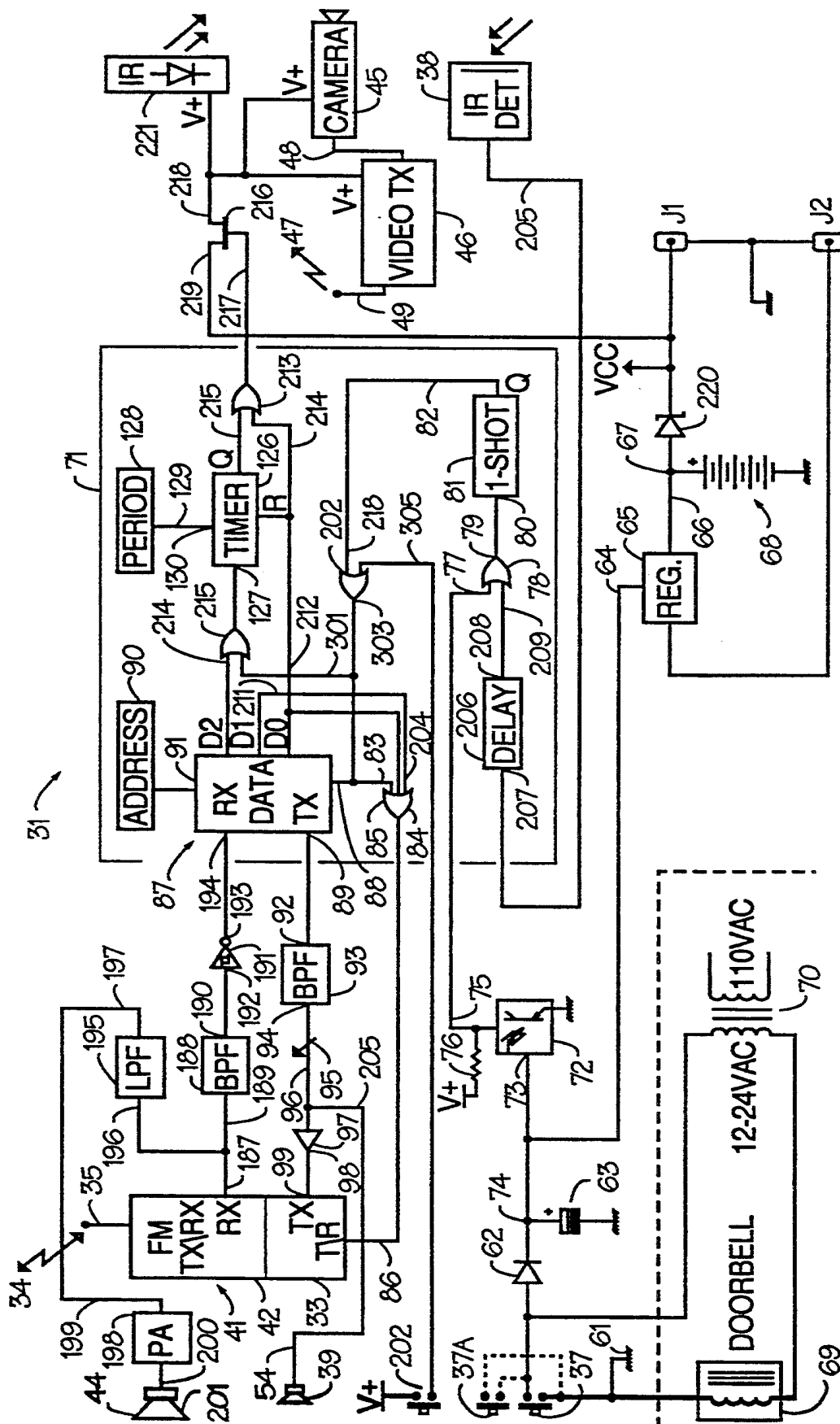


FIG. 11

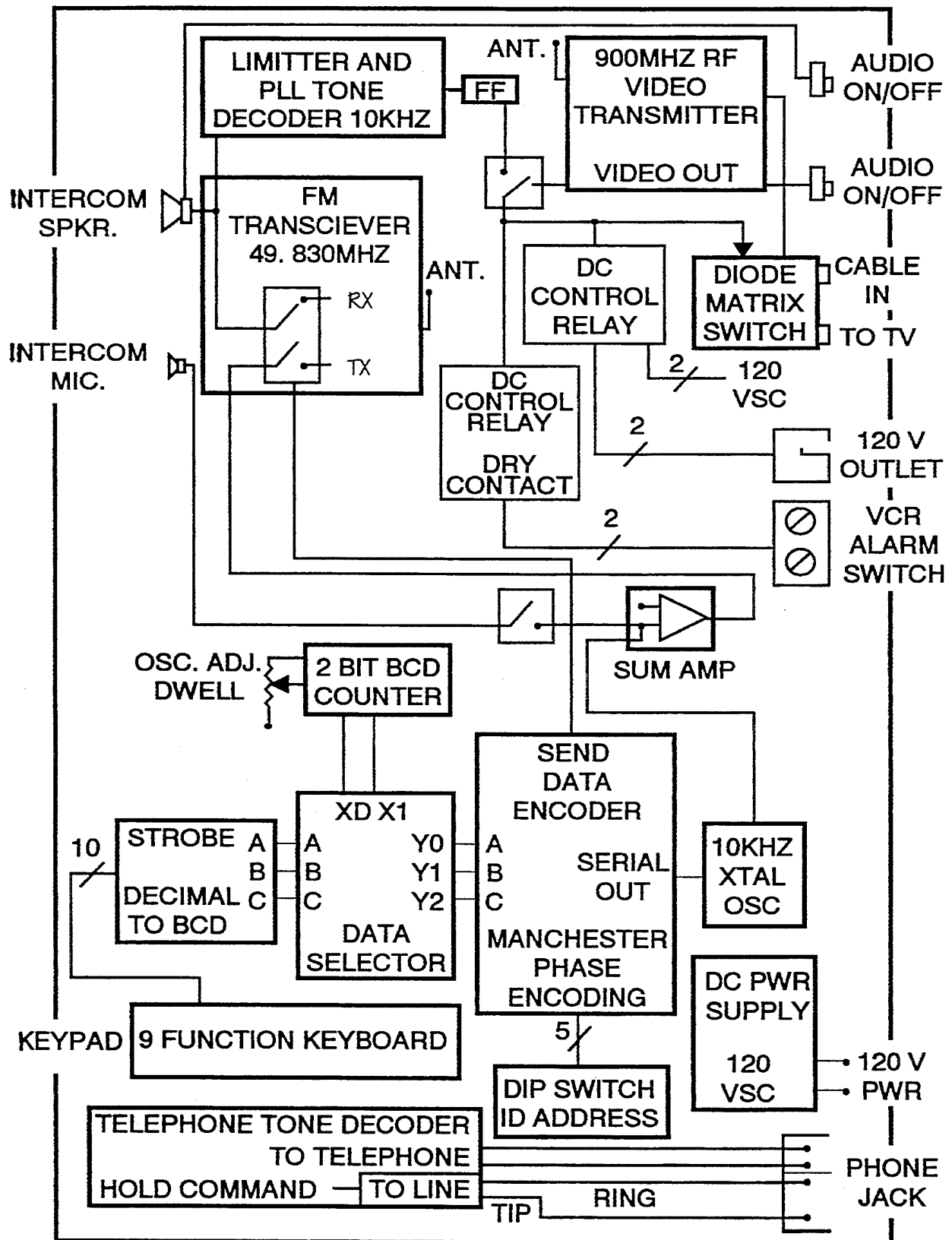


FIG. 12

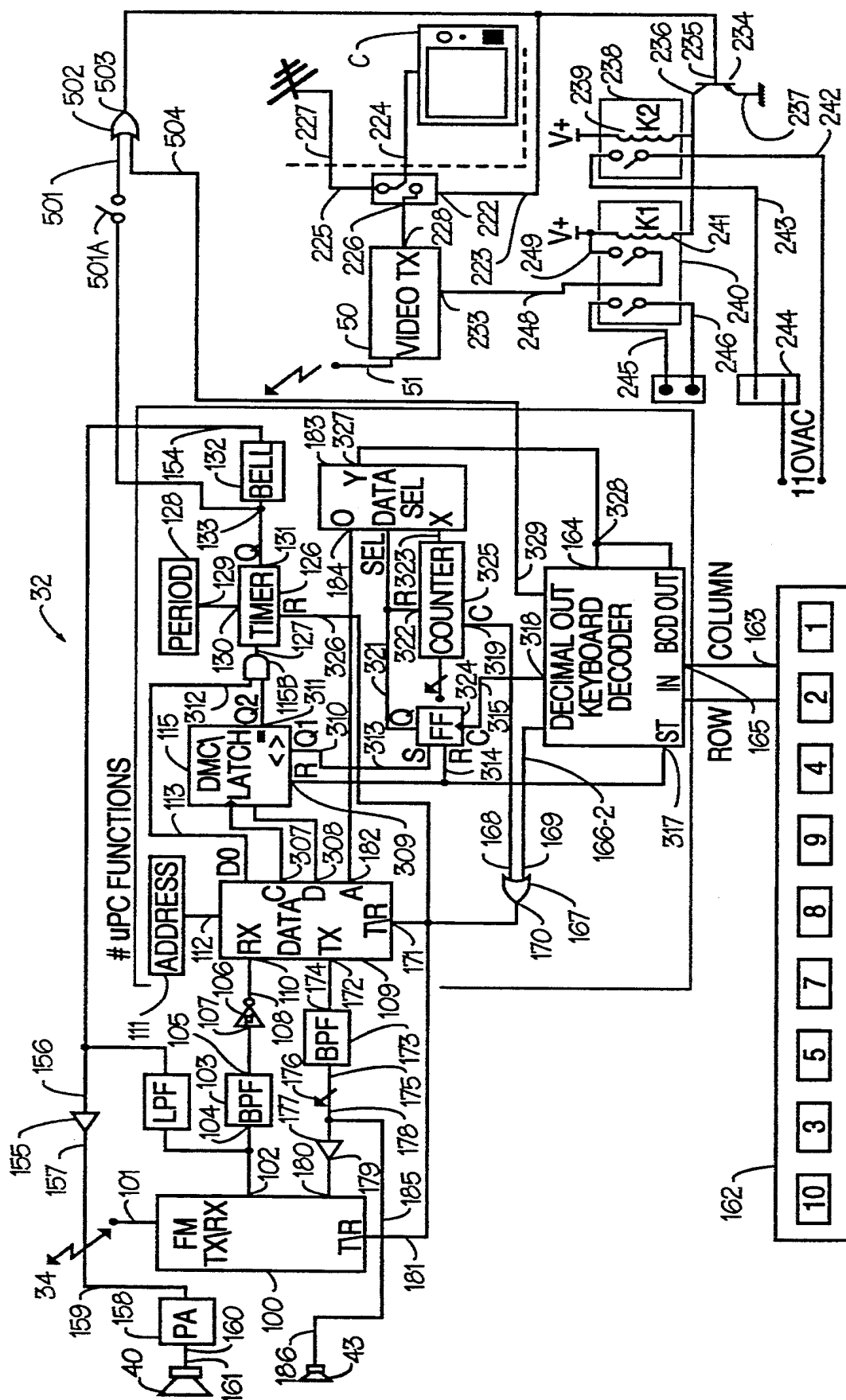


FIG. 13

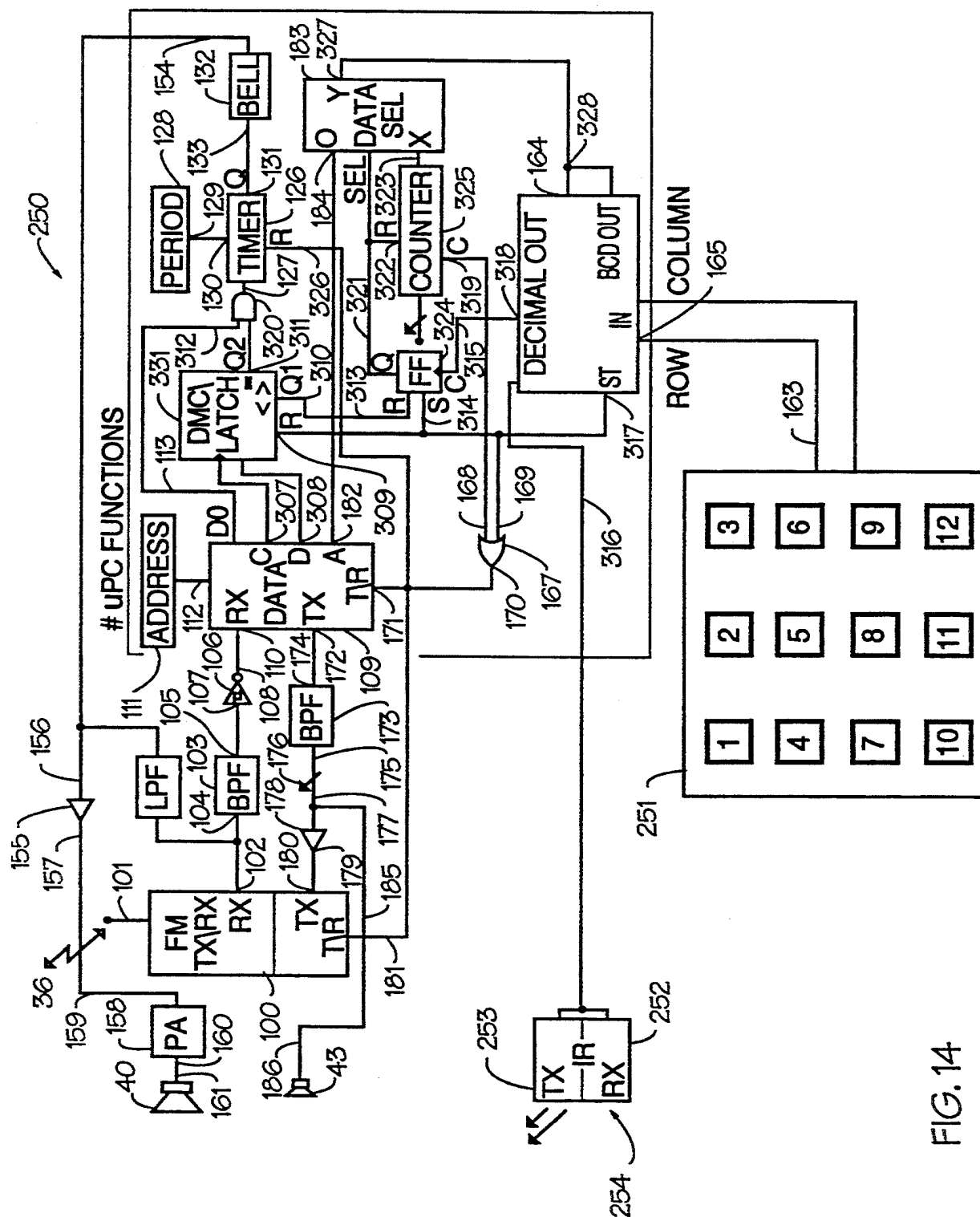


FIG. 14

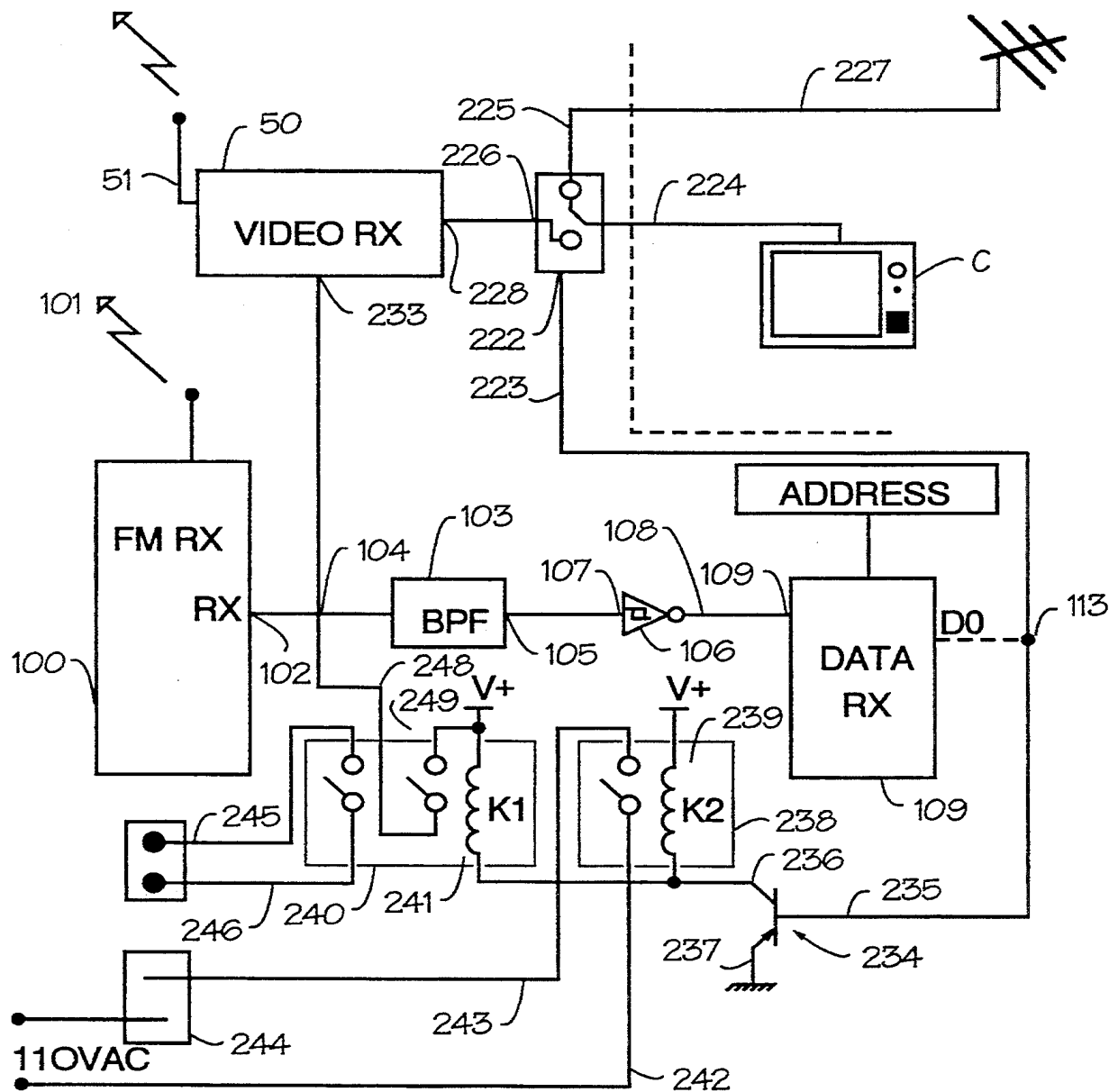


FIG. 15

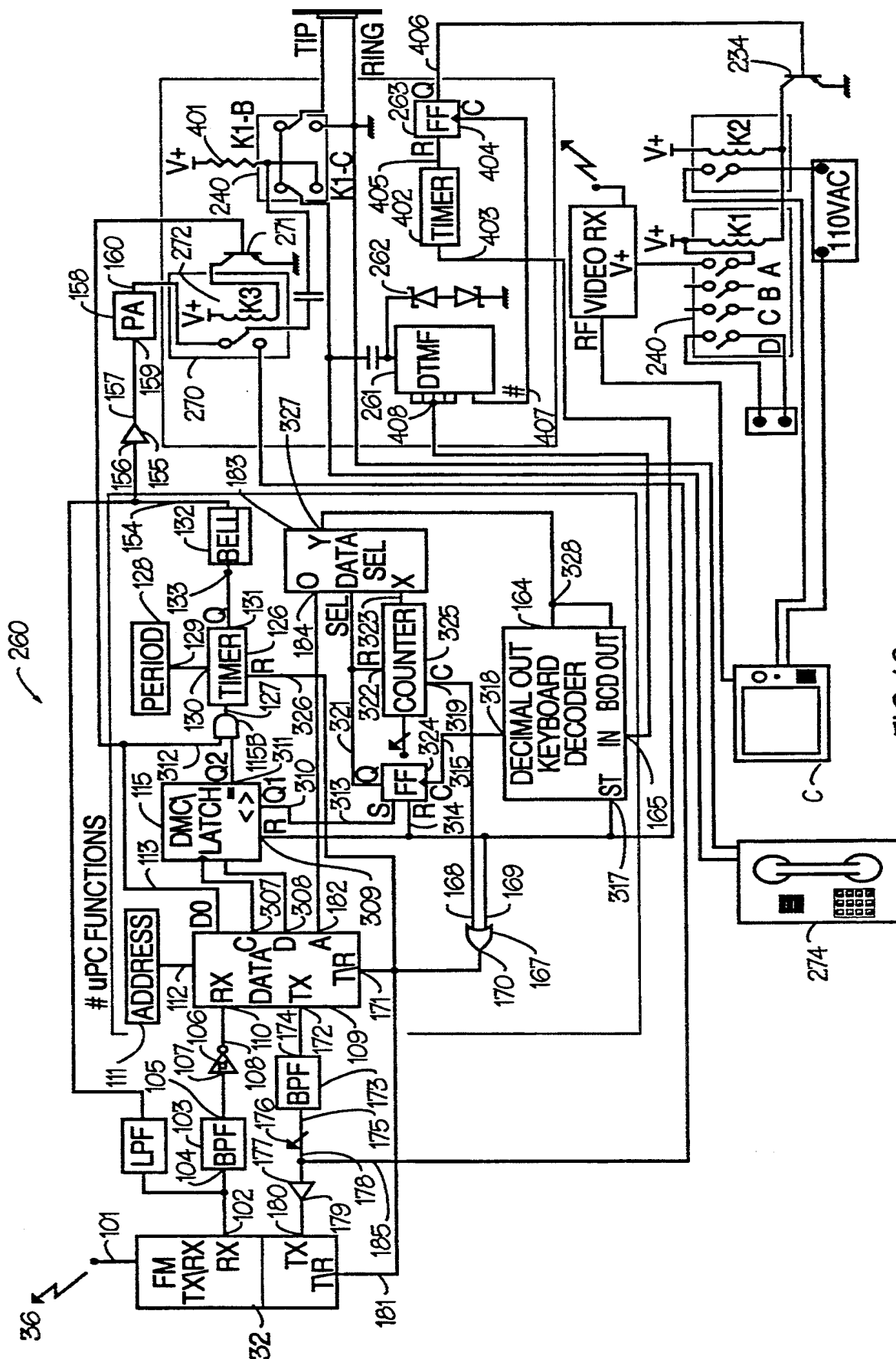


FIG. 16

VIDEO DOORBELL SYSTEM

BACKGROUND OF THE INVENTION

A. Field of the Invention

This invention relates to apparatus for announcing the presence of a person at the entrance of a structure or certain other localities to an occupant of the structure, and for communicating between the occupant and visitor. More particularly, the invention relates to signaling, voice communication, and video camera apparatus connectable to an existing doorbell button.

B. Description of Background Art

Frequently, an occupant of a structure such as an apartment building or private residence would like to communicate with a visitor, family member, or other such person, who has rung a doorbell located at the entrance to the structure. Having identified the person, the occupant can decide whether he or she wishes to admit the person to the building and/or to communicate further with the person. Thus, some apartment buildings are equipped at their entrances with an annunciator system comprising an array of doorbell buttons, and a microphone and loudspeaker allowing two-way voice communication between a visitor and the occupant of an apartment selected by the visitor. Such systems often include an electromechanical door release mechanism operable remotely by the apartment occupant, to let authorized individuals into the apartment building. Some annunciator systems also include a closed circuit television system including a camera viewing the building entranceway, the camera being connected to a television monitor viewable by occupants of the building.

Annunciator systems permitting two-way voice communications and one-way remote viewing usually require the installation of relatively long runs of interconnecting cables which must be installed in unobtrusive locations such as spaces between walls. Such cable installations can add considerable expense and inconvenience to the installation of such annunciator systems. That expense and inconvenience may at least partially explain the relatively small number of individual homes or small businesses having annunciator systems provided with voice and/or video transmission capability.

To eliminate the requirement for extensive cable installation procedures, some devices disclosed in the prior art utilize a radio-frequency (RF) link to carry two-way voice signals between a building entranceway and a monitoring station within the building. However, these prior art systems must still be connected to a source of electrical power. Some prior art annunciator systems possess a video as well as audio signal transmission capability, but require the use of cables connected between an annunciator station and a monitor station.

Typical prior art monitoring or annunciator systems of the type described above are described in the following United States Patents:

Moore, U.S. Pat. No. 3,480,727, Nov. 25, 1969, Closed Circuit Television Protection System:

Discloses a closed circuit television system for use in monitoring a door or other entranceway, to permit recognition of a visitor before the door is opened. The system includes wiring between a camera and loudspeaker located near the door, to a television monitor in which the filament of the picture tube is constantly energized by heating current, thereby allowing instant display of a scene viewed by the camera, when a switch is actuated. The direction of one-way voice communi-

cation between the camera loudspeaker/microphone and the monitor loudspeaker/microphone is selectable by a switch.

Desanti, U.S. Pat. No. 4,075,659, Feb. 21, 1978, Electronic Door Announcer:

Discloses an electronic door announcer for apartments of a multi-family dwelling having a community television antenna in which signals due to sound and video operation of the announcer are carried by at least part of the community antenna coaxial cable system, switching means for the individual apartments being connected into said coaxial cable system.

Cohn, U.S. Pat. No. 4,370,675, Jan. 25, 1983, Doorbell Actuated Television Security System:

Discloses a video security system with intercom activated by means of a doorbell. The video input to a remote camera is automatically presented on the video display of a television receiver upon activation of the doorbell while audio from the intercom's speaker microphone is output through the television receiver's speaker system. Following a predetermined time interval after doorbell actuation, the system automatically turns off. If the television receiver is on when the doorbell is actuated, the system automatically provides video camera and intercom information at the television, reverting to the received television signal mode of operation upon user selection.

Levinson, et al., U.S. Pat. No. 4,523,193, Jun. 1, 1985, Remote-Controlled Doorbell Signal Receiver:

Discloses a remote-controlled doorbell adapted for connection across the existing doorbell in a building having a wired doorbell system. A transmitter for generating an over-the-air radio signal is coupled across the wired doorbell so that the transmitter will be actuated in response to current flowing through the wired doorbell. A remote receiver coupled to sound producing means receives the over-the-air radio signal and actuates the sound producing means when the existing doorbell is energized.

Lefkowitz, U.S. Pat. No. 4,524,384, Jun. 18, 1985, Video and Audio Security System:

Discloses a video and audio system for monitoring an area, particularly an area adjacent a door. The system includes a video and audio assembly adapted to be mounted to a door and a video and audio console spaced from the door. Opening of the door is controlled by an electric door strike operated from the console. Both the console and the assembly include audio elements which permit simultaneous two-way communication. A limited number of conductors, one of which carry high voltage, couple the assembly and the console.

Chern, et al., U.S. Pat. No. 4,764,953, Aug. 16, 1988, Method and Apparatus for Remote Doorbell Answering:

Discloses an apparatus for providing remote answering of a doorbell that includes a circuit for receiving a doorbell signal indicative that a doorbell switch has been actuated. An autodialing circuit is coupled to and responsive to the receiving circuit and a telephone line for dialing a telephone number responsive to the doorbell signal. An alerting circuit generates an alert signal to be transmitted over the telephone line to the telephone number dialed by the autodialing circuit, so that the alert signal may alert a party answering the remote telephone to the fact that the party is responding to a doorbell rather than a normal telephone call. An audio

speaker is physically situated near the doorbell switch, for reproducing audio signals from the telephone line which are generated at the remote telephone. An audio microphone is also physically situated near the doorbell switch, for generating electrical signals responsive to sounds made near the doorbell switch and transmitting the signals to the telephone line to the remote telephone. The apparatus further includes a switching network for coupling the door speaker and microphone to a local telephone set and a remote telephone set selectively in any combination.

Tatsumi, et al., U.S. Pat. No. 4,843,461, Jun. 27, 1989, Over-Door Interphone System Provided With a Night-Vision Monitoring Device:

Discloses an over-door interphone system for telephone communication between a master station unit, inside of a house, and a remote station unit, outside of an entrance door of the house, that is provided with a night-vision monitoring device. The system includes a television camera having a solid state camera sensitive to infrared light, and an infrared illuminator source comprising an array of infrared light emitting diodes. Morotomi, et al., U.S. Pat. No. 4,959,713, Sep. 25, 1990, Home Automation System:

Discloses a home automation system in which a coaxial cable or other data bus is placed inside a home to connect an intercom unit and monitor camera for communication with visitors, to a conventional home television connected to the bus, thereby making it possible to output audio and video signals from the intercom unit and monitor camera on a conventional broadcast reception television.

The present invention was conceived of to provide an improved annunciator/monitoring system which eliminates the requirement for running electrical power and signal cables to a remote annunciator or monitoring station.

OBJECTS OF THE INVENTION

An object of the present invention is to provide a system for communicating information from a remote location to a monitoring location, without requiring interconnecting wires between the respective locations.

Another object of the invention is to provide a wireless information-communicating system not requiring an external primary source of electrical power.

Another object of the invention is to provide a doorbell annunciator system not requiring interconnecting wires between a remote location and a monitoring location.

Another object of the invention is to provide a wireless doorbell annunciator system not requiring an external source of primary electrical power at a remote location.

Another object of the invention is to provide a wireless doorbell annunciator system incorporating means for drawing electrical power from doorbell button wires at a level sufficient to charge storage elements within the system for proper operation, but not so large a level as to cause operation of a bell or other previously existing annunciator device wired to the doorbell button.

Another object of the invention is to provide an internally powered annunciator system that is actuable by depressing a doorbell button to send a wireless annunciator signal to a monitoring device comprising a part of the system.

Another object of the device is to provide a doorbell-button powered annunciator system actuable by a sensor device to send a wireless annunciator signal to a monitoring device upon detection of a human being in the presence of the sensor device.

Another object of the invention is to provide a wireless doorbell system capable of conducting voice signals between a remote annunciator device and a monitoring device.

Another object of the invention is to provide a wireless doorbell system capable of conducting a video signal from a scene viewed by a remote device to a monitoring device.

Another object of the invention is to provide a video doorbell system incorporating means for automatically interrupting scenes displayed on a television monitor and displaying scenes viewed by a remote viewing device.

Another object of the invention is to provide a video doorbell system incorporating means for interrupting a telephone conversation and conveying to the telephone receiver audio signals received by a remote microphone.

Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.

Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.

Another object of the invention is to provide a system for monitoring audible and visible information in the vicinity of remote sensor apparatus.

Another object of the invention is to provide a system for monitoring audible and visible information in which a plurality of self-contained remote viewing and listening stations may transmit video signals and audio signals to a monitoring station, and receive audio signals from the monitoring station.

Various other objects and advantages of the present invention, and its most novel features, will become apparent to those skilled in the art by perusing the accompanying specification, drawings and claims.

It is to be understood that although the invention disclosed herein is fully capable of achieving the objects and providing the advantages described, the characteristics of the invention described herein are merely illustrative of the preferred embodiments. Accordingly, we do not intend that the scope of our exclusive rights and privileges in the invention be limited to details of the embodiments described. We do intend that equivalents, adaptations and modifications of the invention reasonably inferable from the description contained herein be included within the scope of the invention as defined by the appended claims.

SUMMARY OF THE INVENTION

Briefly stated, the present invention comprehends an annunciator system including a remote sensing station which is capable of transmitting audio and visual data to a monitoring station via modulated radio waves. In one embodiment of the system, a sensing station including a microphone, loudspeaker, and television camera is mounted near the entrance to a building, and contains an internal battery which is trickle-charged by electrical

power derived from doorbell button wires, the latter being in series with a source of electrical power and an annunciator such as a doorbell. The trickle charge rate is controlled to a sufficiently low value to prevent unwanted activation of the existing doorbell.

Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.

In the preferred embodiment, the system includes apparatus to automatically interrupt television viewing and/or telephone conversations within the building upon reception of the annunciator signal. Means may also be provided to permit operation of the video doorbell system by depressing appropriate buttons in the keypad of a standard "TOUCH-TONE" (DTMF) telephone.

Also, the system may optionally include a portable controller and voice communicator which may be used to conduct two-way voice communication between a visitor and a building occupant, and to remotely control operation of a television monitor by the occupant.

The annunciator system according to the present invention may also be configured to sequentially and remotely command transmissions of audio and/or visual data from selected stations of a plurality of remote sensing stations. The remote sensing stations may include self-contained, solar-powered units as well as doorbell stations powered by a doorbell power source.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1, including FIG. 1A and FIG. 1B is a pictorial diagram of a basic embodiment of a video doorbell system according to the present invention.

FIG. 2 is a partly sectional front elevation view of a Video Doorbell Station (DBS) of FIG. 1, showing a front cover of the DBS removed.

FIG. 3 is a sectional side elevation view of the apparatus of FIGS. 1 and 2.

FIG. 4 is a pictorial diagram of an alternate embodiment of a video doorbell system according to the present invention, using a hand-held controller and voice communicator.

FIG. 5 is a more detailed view of the hand-held controller apparatus of FIG. 4.

FIG. 6 is an enlarged, fragmentary upper plan view of the apparatus of FIG. 5.

FIG. 7 is a schematic view of a telephone interface unit usable with the system of FIG. 1.

FIG. 8 is a perspective view of a portable Video Doorbell Station (DBS) usable with the system of FIG. 1.

FIG. 9 is a perspective view of a modification of the DBS of FIG. 8, showing the modified DBS attached to a pole.

FIG. 10 is a block diagram of a basic embodiment of a Video Doorbell Station (DBS) comprising a first major component of a video doorbell system according to the present invention.

FIG. 11 is a block diagram similar to FIG. 10, but somewhat more detailed and partially schematic.

FIG. 12 is a block diagram of a basic embodiment of a video doorbell receiving station (VRS) comprising a second major component of a video doorbell system according to the present invention.

FIG. 13 is a block diagram similar to FIG. 12, but somewhat more detailed and partially schematic.

FIG. 14 is a schematic diagram of a wireless controller and voice communicator used in the alternate embodiment of the present invention depicted in FIG. 4.

FIG. 15 is a schematic diagram of a relay station used with the wireless controller and voice communication of FIG. 14, in the alternate embodiment of the present invention depicted in FIG. 4.

FIG. 16 is a block diagram of a telephone interface unit comprising a component of an alternate embodiment of the present invention, showing the interface unit interconnected with other components of the system.

DETAILED DESCRIPTION OF THE INVENTION

1. Overview

Referring now to FIGS. 1 through 16, a novel video doorbell system according to the present invention is shown.

As shown diagrammatically in FIG. 1, a basic embodiment of the Video Doorbell System (VDBS) includes a remote sensing station module 31 referred to as a Doorbell Station (DBS) that is adapted to be mounted to a building A near an entranceway B of the building. Video Doorbell System 30, according to the present invention also includes a Video Receiver Station (VRS) 32 that is located within building A, typically near a television monitor C. As shown in FIGS. 10 and 11, doorbell station 30 includes a first radio frequency (RF) transmitter 33, operating at a frequency of, for example, about 49 megahertz (Mhz). The function of transmitter 33 is to transmit an RF signal 34 to Video Receiver Station 32, FIGS. 12 and 13, between DBS antenna 35 and VRS antenna 36. RF signal 34 is generated by transmitter 33 in response to actuation of a doorbell button 37 on DBS 31, or to actuation of a sensor, preferably a pyroelectric infrared detector 38 responsive to the presence of a person in the vicinity of the DBS, as will be explained in detail below. Other types of sensors, such as those employing ultrasonic waves or microwaves, could of course be used in place of an infrared detector.

In the preferred embodiment of system 30, transmitted RF signal 34 may be modulated by audio signals detected by a microphone 39 in DBS 30, thus permitting voice communications to be transmitted from the DBS to a loudspeaker 40 in Video Receiver Station 32. Also in the preferred embodiment of system 30, first transmitter 33 of DBS 30 is part of a transceiver 41 which also includes an RF receiver 42 for receiving voice communications picked up by a microphone 43 located in Video Receiver Station 32. Receiver 42 is connected to a loudspeaker 44 in DBS 31, allowing voice communications to be transmitted from a person within the building to a visitor. Thus, the preferred embodiment of Video Doorbell System 30 affords a capability for two-way voice communications between a visitor in the vicinity of Doorbell Station 31 and a person at Video Receiver Station 32.

A particularly novel and advantageous feature of Doorbell Station 30 is its capability of being substituted for an existing doorbell button without requiring the installation of any power or signal wires. The structure and function of Doorbell Station 30 that affords this capability is described in detail below. As may be seen best by referring to FIGS. 1 and 11, Doorbell Station 31 includes a pushbutton 37 that replaces the function of the original doorbell button at entranceway B of building A. Optionally, pushbutton 37 can be connected by wires to an existing doorbell button, allowing operation of the system by either pushbutton, while allowing placement of doorbell station 31 out of easy reach of vandals.

The preferred embodiment of Doorbell Station 31 also includes a television camera 45. Preferably camera 45 is of the type employing a solid state, Charge Coupled Device (CCD) as an imaging transducer. Video output signals from CCD camera 45 are connected to a second radio frequency transmitter 46, where the video signals are used to modulate an RF signal 47 transmitted by the second transmitter. Preferably, second RF transmitter 46 operates at a different frequency from that of first transmitter 33. Thus, for example, second RF transmitter 46 may operate at a nominal frequency of 910 Mhz. The function of second transmitter 46 is to transmit an RF signal 47 modulated by a composite video signal 48 produced by CCD camera 45. Video RF signal 47 is transmitted from antenna 49 to an antenna 51 coupled to a video receiver 50 located in Video Receiver Station 32. A composite video signal representing a scene viewed by CCD camera 45 may then be coupled to a television monitor C in a manner described in detail below.

2. DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIGS. 1 and 2 and FIGS. 10 through 11 show a Video Doorbell Station (DBS) 31 comprising one of two major components of a Video Doorbell System (VDBS) 30 according to the present invention. As may be seen best by referring to FIGS. 1 and 2, Video Doorbell Station 31 includes an enclosure 60 of a suitable size and shape to be attached to a structure wall, for example, adjacent to a doorway B of a building A, as shown in FIG. 1. In a particular embodiment of housing 60 found suitable by the present inventors, enclosure 60 is a rectangular box of the approximate dimensions of 2 inches thick by 4½ inches wide by 6½ inches high.

As may be seen best by referring to FIG. 1A, Video Doorbell Station 31 includes a pushbutton switch 37 that replaces the doorbell button originally installed at the entrance to building A. In certain applications where it would be desirable to mount housing 60 away from an existing doorbell button, to place Doorbell Station 31 out of reach for vandals, for example, a pair of wires may be led out of the enclosure to the existing doorbell. In this configuration, the existing doorbell button 32A and pushbutton 37 would be connected in parallel, as shown in FIG. 11.

As shown in FIGS. 10 and 11, one terminal of SPST pushbutton 37 is connected to a common ground terminal 61 for circuitry within enclosure 60, while the other terminal of the pushbutton is connected to the anode terminal of rectifier 62. Also as shown in FIGS. 10 and 11, rectifier 62 comprises a single diode. Optionally, rectifier 62 could be a full wave bridge rectifier comprising four diodes. In either case, the cathode(s) output terminal(s) of rectifier 62 are connected to the positive

terminal of a filter capacitor 63 and to the positive input terminal 64 of a constant current regulator 65. An output terminal 66 of regulator 65 is connected to the positive terminal 67 of a 12-volt nickel-cadmium (NICAD) rechargeable battery 68. Regulator 65 is adjusted to trickle-charge battery 68 at a level insufficient to cause doorbell 69 to ring. Thus, alternating current normally supplied to doorbell 69 by transformer 70 through a doorbell button is rectified by rectifier 62 and used to maintain battery 68 at a sufficient charge level to operate all of the electrical circuitry of Video Doorbell Station 31. We have found that limiting the charging current drawn from rectifier 62 to a value of about 75 milliamperes provides a satisfactory charging rate for battery 68 while ensuring that doorbell 69 will not ring unless pushbutton 37 is depressed.

As was described previously in the overview, Video Doorbell Station (DBS) 31 includes a radio frequency transceiver 41 for sending via RF-signal 34 audio information picked up by microphone 39 of the DBS to Video Receiver Station (VRS) 32, and for receiving RF from the Video Receiver Station via RF-signal 34 voice communications spoken into microphone 43 of the Video Receiver Station and conducting these voice signals to loudspeaker 44 of the Video Doorbell Station. As was also described in the overview, Video Doorbell Station 31 includes a CCD camera 45 which modulates an RF output signal 47 produced by Video Transmitter 46 and transmitted to Video Receiver Station 32. Video Doorbell Station 31 also includes timing and control circuitry designated generally by the box 71 in FIG. 11. As those skilled in the art will recognize from the ensuing description of the functions of box 71, those functions could be performed by a microprocessor, as well as by integrated and/or discrete electronic devices. Transceiver 41, transmitter 46, and timing and control circuitry 71 of Video Doorbell Station 32 are powered and actuated when pushbutton 37 is depressed, in a manner which will now be described.

As shown in FIG. 11, Video Doorbell Station 31 includes an opto-isolator 72, an input terminal 73 of which is connected to positive terminal 74 of filter capacitor 63. When pushbutton 37 is momentarily depressed, filter capacitor 63 is discharged at a sufficiently fast rate for opto-isolator 72 to turn off, allowing the output terminal 75 of the opto-isolator, which is connected internally to the collector of a photo-transistor within the opto-isolator, to rise to a logic true level, since the output terminal is connected through a pull-up resistor 76 to a positive collector supply voltage VCC. Thus, opto-isolator 72 is used here as a threshold detector, producing a logic true level at its output terminal 75 when the voltage input to rectifier 62 is reduced to zero upon depressing pushbutton 37 (or an existing doorbell button 37A, if connected to 37).

Output terminal 75 of opto-isolator 72 is connected to a first, or "A" input terminal 77 of a two-input OR gate 78. Output terminal 79 of OR gate 78 is connected to the trigger input terminal 80 of a monostable multivibrator or "one-shot" 81. Thus, when doorbell button 37 is depressed, the resulting transition of output terminal 79 of OR gate 78 to a logic true level causes a logic true voltage pulse, preferably of about one-second duration, to occur at the output terminal 82 of one-shot 81. The aforementioned one-shot pulse initiates a sequence of operations in doorbell station 31, which will now be described.

As shown in FIGS. 10 and 11, output terminal 82 of one-shot 81 is connected through an OR gate 302 to an input terminal 83 of a 4-input OR gate 84. Output terminal 85 of OR gate 84 is connected to transmit/receive mode select input terminal 86 of FM transceiver 41. When terminal 86 is true, FM transceiver 42 is placed in a transmit mode. Timing and control circuitry 71 also includes a serial encoder/decoder 87 having a transmit/receive (Tx/Rx) mode control input terminal 88 connected to output terminal 82 of one-shot 81 through OR gate 30Y. When mode control input terminal 88 receives a true-going pulse from one-shot 81, serial encoder/decoder 87 is placed in a transmit mode for the duration of the pulse, outputting serial data bits on serial output port 89. In this mode, the address of a particular doorbell station 31, which has been previously selected by the user by means of contact closures of a DIP switch 90 inside enclosure 60 which is connected to a parallel data input port 91 of serial encoder/decoder 87, is outputted on serial output data port 89. Serial output data port 89 is connected to input port 92 of a 10-KHZ bandpass filter 93. The function of bandpass filter 93 is to eliminate unwanted harmonics from the rectangular pulse train emitted from output port 89 of serial encoder/decoder 87.

Output terminal 94 of bandpass filter 93 is connected through a modulation level control potentiometer 95 to an input terminal 96 of a summing amplifier 97. The output terminal 98 of summing amplifier 97 is connected to the modulator input terminal 99 of FM transceiver 42. This arrangement results in production of an FM RF signal 34 outputted from FM transceiver 41 which is phase-modulated with Manchester encoded data identifying the address of doorbell station 31. Referring now to FIGS. 12 and 13, as well as FIGS. 10 and 11, a one-second long burst of RF energy modulated by the DBS address data is transmitted by DBS FM transceiver 42 to an FM transceiver 100 in video receiver station 32, being received by an antenna 101 connected to that transceiver. Transceiver 100 includes a demodulator having an output terminal 102 on which demodulated signals, typically in the audio frequency band, appear. Transceiver demodulator output terminal 102 is connected to input terminal 104 of 10-KHZ bandpass filter 103. An output terminal 105 of bandpass filter 103 is connected to input terminal 107 of a low level comparator 106. Output terminal 108 of comparator 106, on which a digital bit stream representing the address of a doorbell station 31 which is transmitting to Video Receiver Station 32 appears, is connected to serial input port 110 of a serial decoder/encoder 109.

Serial decoder/encoder 109 is programmed by user-selected contact closures of a DIP switch 111 connected to a parallel input port 112 of serial decoder/encoder 109 to a particular address. If the address of a Video Doorbell Station 31 encoded on the signal inputted to serial input terminal 110 of serial decoder/encoder 109 coincides with the pre-set address of the decoder/encoder, a true signal is outputted from DO output terminal 113 of the decoder/encoder for the duration of the transmitted signal. Simultaneously, logic network 115 receives the synchronized serial data clocked from output terminals 307 and 308 of data decoder 109. The logic network 115 contains two shift registers, one static, one dynamic and a digital magnitude comparator (DMC). The incoming serial data is then stored in the dynamic registers and compared to data in the static register through the DMC where it is

decided if the two words match, making "Q2" output 311 true, or are unequal, making "Q1" output terminal 310 true. The reset terminal 309 clears the two registers via the keyboard strobe line 317. True logic levels on D0 and Q2 output terminals 113 of serial decoder/encoder 109, and Q2 output 311 of DMC latch 115 are inputted to logic network 115, including latch 115A and AND gate 115B, which produces at its output terminal a true logic level upon the receipt by Video Receiver Station 32 of a burst of RF energy from a Video Doorbell Station 31 having an address corresponding to an address programmed into serial decoder/encoder 109 by DIP switch 111. Output terminal 125 of logic network 115 is connected to a trigger input terminal 127 of a programmable timer 126. A "ring duration" or PERIOD DIP switch 122 has an output port 129 connected to an input port 130 of programmable timer 126. Programmable timer 126 is programmable by DIP switch 128 to produce at output terminal 131 of the programmable timer a true logic level having duration adjustable from 15 seconds to 60 seconds in 15-second increments. The storing and comparing of the stored data to real time data is performed by an Automatic Dwell State Detector, which will now be described.

An Automatic Dwell State Detector detects when more than one slave station is active during the preset period of timer 126. Once the dynamic shift register has latched its first successful address, it will continue to be compared to the static register "real time data" being received within the time period. If a second slave station becomes active within this time period and the user does not acknowledge the first address annunciation, then the DMC will output an unequal "no-match" detection on "Q1" output terminal 310, indicating that more than one station is transmitting its information.

FLIP-FLOP 324 directs the dwell state command. In normal operation, keyboard decoder 164 outputs the "sequence command" 318 to the clock input terminal 315 of the flip-flop (strobe 317 remains low). During this time, "Q" output terminal 321 toggles either high or low. When "Q" terminal 321 is high, counter 325 is disabled via reset terminal 322 and the "select line" of data selector 183 connects BCD data 328 of keyboard decoder 164 to the "Y" input 327 of data selector 183, which in turn appears at "O" output terminal 184. Output terminal 184 is connected to address input terminal 182 of data encoder 109. Data on this line represents the control bits for the various remote camera/VDB locations. These control bits are added to the present address of address dip switch 111, and transmitted for remote reception. Likewise, when "Q1" output terminal 310 of the DMC/latch 305 is true, reset terminal 313 of flip-flop 324 forces "Q" output terminal 321 of the flip-flop low. This in turn enables counter 325 via reset terminal 322 to output a 2-bit "counting code" to input terminal 323 of data selector 183. Data select line 183A of data selector 183 connects the 2-bit counting code from the "O" output terminal 184 of the data selector, to address input 182 of data encoder 109. The 2-bit counting code is synchronously transmitted via clock output 319 of counter 325 and OR gate input 168. The dwell state is canceled when keyboard strobe line 317 is inputted to SET terminal 314 of flip-flop 324.

As shown in FIG. 13, KEYBOARD DECODER 164 decodes keyboard information from keyboard 162. When used in telephone interface unit, FIG. 16, the keyboard decoder also decodes BCD information from DTMF decoder 261. Keyboard decoder 164 can inter-

pret the incoming data at terminal 165 as either BCD or decimal outputs. It also contains a keyboard strobe line, item 317 which monitors keyboard activity, producing a true output for the duration of a key closure. Keyboard 162 is configured in an X, Y matrix that contains 10 to 12 push buttons. Push button functions of keyboard 162 are:

- #1—Listen
- #2—Talk
- #3—Call up (turn on and transmit door station video)
- #4—Channel 3 Select T.V.
- #5—Camera sequence
- #6—Camera 1 (home)
- #7—Camera 2 (home)
- #8—Camera 3 (home)
- #9—Camera 4 (home)
- #10—Power on/off

Output terminal 131 of programmable timer 126 is connected to an enable input terminal 133 of "acoustic bell simulator" circuitry 132. When enable input terminal 133 is true, acoustic bell simulator circuitry 132 produces on its output terminal 154 an analog signal having a frequency spectrum approximating that of a ringing bell. That output signal is coupled to an input terminal 156 of a summing amplifier 155. Output terminal 157 of summing amplifier 155 is connected to an input terminal 159 of an audio power amplifier 158. Output terminal 160 of audio power amplifier 158 is connected to input terminal 161 of loudspeaker 40 of Video Receiver Station 32. Thus, when Video Receiver Station 32 receives a properly encoded annunciator signal from a Video Doorbell Station 31, loudspeaker 40 of the Video Receiver Station 32 outputs an acoustic bell-like signal alerting a building occupant in the vicinity of the Video Receiver Station that a visitor has pressed the doorbell button of a Video Doorbell Station.

Video Receiver Station 32 includes means for switching both FM transceiver 100 and serial decoder/encoder 109 into a transmit mode. Thus, for example, if a building occupant hears a ringing signal emitted by loudspeaker 40, the occupant may depress a TALK button 162-2 on a control keyboard 162 included in the Video Receiver Station 32. Keyboard 162 has an output port 163 connected to the input port 165 of a keyboard decoder 164.

When TALK button 162-2 is depressed, output terminal 166-2 of an output port 166 of keyboard decoder rises to a logic true level. Since output terminal 166-2 of keyboard decoder 164 is connected to B input terminal 169 of an OR gate 167, pressing talk button 162-2 causes a logic true level to occur at the output terminal 170 of the OR gate. Output terminal 170 of OR gate 167 is connected to Tx/Rx mode select input terminal 171 of serial decoder/encoder 109.

When mode select input terminal 171 of serial decoder/encoder 109 is at a logic true level, the serial decoder/encoder 109 is placed in a transmit, or encoding mode. In this mode, the address of Video Receiver Station 32, inputted to serial decoder/encoder 109 via address DIP switch 111, is emitted as a serial data word on serial output port 172 of the serial decoder/encoder. Serial output port 172 is connected to input port 174 of a 10-KHZ bandpass filter 173. Output terminal 175 of bandpass filter 173 is connected through a modulator level control potentiometer 176 to an input terminal 178 of a summing amplifier 177. The output terminal 179 of

summing amplifier 177 is connected to the modulator input terminal 180 of FM transceiver 100.

Now, since Tx/Rx mode select input terminal 181 of FM transceiver 100 is also connected to output terminal 170 of OR gate 167, the FM transceiver is placed in a transmit mode simultaneously with serial encoder/decoder 109. Thus configured, Video Receiver Station 32 transmits an RF signal back to Video Doorbell Station 31 which is phase-modulated with a code effective in selecting a desired video doorbell station of a group of Video Doorbell Stations. The complete address emitted by FM transceiver 100 contains bits entered into a parallel data input port 182 of serial encoder/decoder 109, that data input port being connected to a data output port 184 of a data selector 183.

Summing amplifier 177 that drives modulator input terminal 180 of FM transceiver 100 also has a second input terminal 185 that is connected to the output terminal 186 of microphone 43 of Video Receiver Station 32. Thus, when FM transceiver 100 is in a transmit mode, FM modulated RF signal 34 emitted by the transmitter includes voice communication signals spoken into microphone 43.

At Video Doorbell Station 31 (FIGS. 10 and 11), FM-modulated RF signal 34 is received by antenna 35 and coupled to FM transceiver 41. Contained within FM transceiver 41 is a demodulator having an output terminal 187 on which are emitted the audio signals and digital data which were inputted to summing amplifier 177 of Video Receiver Station 32.

Demodulator output terminal 187 of FM transceiver 41 is connected to input terminal 189 of a 10-KHZ band-pass filter 188. Output terminal 190 of 10-KHZ band-pass filter 188 is connected to input terminal 192 of a low level comparator 191. Output terminal 193 of low level comparator 191 is connected to serial input port 194 of serial encoder/decoder 87. Serial digital data on input port 194 is used to direct operation of timing and control circuitry 71 of Video Doorbell Station 31, as was previously described.

Demodulator output terminal 187 of FM transceiver 41 is also connected to the input terminal 196 of a 3-KHZ low-pass filter 195. The function of 3-KHZ low-pass filter 195 is to filter out unwanted noise not contributing to the intelligibility of speech, and to filter out 10-KHZ digital data. Output terminal 197 of 3-KHZ low-pass filter 195 is connected to input terminal 199 of an audio power amplifier 198. Output terminal 200 of audio power amplifier 198 is connected to input terminal 201 of loudspeaker 44 of video doorbell station 31. Thus, voice communications spoken into microphone 43 of Video Receiver Station 32 and transmitted to a selected Video Doorbell Station 31 by modulated FM RF signal 34 are amplified and emitted by loudspeaker 44 in the selected Video Doorbell Station.

Voice communication between a visitor at a Video Doorbell Station 31 and a person in the vicinity of Video Receiver Station 32 may be initiated by the visitor's depressing a push-to-talk button switch 202 on enclosure 60 of the doorbell station. One contact of switch 202 is connected to a positive voltage source, while the other contact is connected through OR gate 202 to A input terminal 83 of OR gate 84. Thus, depressing switch 202 makes input terminal 83 and output terminal 85 of OR gate 84 go to a logic true state, as well as the Tx/Rx mode select input terminal 86 of FM transceiver 41, which terminal is connected to the output terminal of the OR gate. This places FM transceiver 42

in a transmit mode. Now, since output terminal 54 of microphone 39 on Video Doorbell Station enclosure 60 is connected to a second input terminal 205 of summing amplifier 97, electrical signals outputted from microphone 39 responsive to a visitor's speech will produce an amplified signal at output terminal 98 of the summing amplifier and modulation input terminal 99 of FM transceiver 41, modulating RF output signal 34 of the transceiver with voice signals.

As was described above, activation of a Video Doorbell Station 31 from a standby mode to an operating mode may be initiated by depressing doorbell button 37. Video Doorbell Station 31 desirably incorporates alternate means of being switched from a standby mode to an operating mode. Thus, as shown in FIG. 13, Video Doorbell Station 31 includes a "human presence sensor" (preferably an infrared proximity detector) 38 having a field of view encompassing a desired region, near the entrance of a building, for example. Output terminal 205 of IR detector 38 goes to a logic true level when a person comes within the field of view of the IR detector and sufficiently close to it. Output terminal 205 of IR detector 38 is connected to input terminal 207 of a delay circuit 206 having an RC time constant of about 10 seconds.

When input terminal 207 of time delay circuit 206 remains true for a period of ten seconds or greater, output terminal 208 of the time delay circuit goes true. Since output terminal 208 is connected to B input terminal 209 of OR gate 78, a true logic level at output terminal 208 initiates transmission of RF annunciator signal 34 from transceiver 41, that signal being receivable by Video Receiver Station 32 to indicate a visitor of that Video Doorbell Station 31, the address of which station is coded in the signal, in the manner previously described above for initiation of annunciator signal in response to actuation of doorbell button 37. The purpose of the delay introduced by time delay circuit 206 is to reduce the rate of false triggering of IR detector 38 by normal pedestrian traffic in the vicinity of the detector.

FM transceiver 41 of Video Doorbell Station 31 is also switched into a transmit mode upon receipt of a LISTEN command signal from video receiver station 32, which makes D1 output terminal 211 of serial encoder/decoder 87 true. Similarly, receipt by Video Doorbell Station 31 of a properly encoded DWELL command makes D2 output terminal 212 of serial encoder/decoder 87 true. A true output level on output terminal 212, which is connected to an input terminal 214 of an OR gate 213, causes output terminal 215 of the OR gate go to a logic true level. Output terminal 215 of OR gate 213 is connected to input terminal 127 of programmable timer 126. The output terminal 131 or programmable timer 126 is connected through OR gate 213 to the gate terminal 217 of a power field effect transistor (FET) 216 that is used to switch on power to CCD camera 45, video transmitter 46, and IR illuminator 221, all connected to source terminal 218 of the FET. Drain terminal 219 of FET 216 is connected to the anode terminal of a Shockley diode 220, the cathode of that diode being connected to positive terminal 67 of battery 68. The purpose of Shockley diode 220 is to block the D.C. voltage supplied by an external A.C. adapter connected to terminals J1 and J2 from being loaded down by battery 68.

Images of objects viewed by CCD camera 45 are displayed on television monitor C as follows.

Referring to FIGS. 10 and 11, a video transmitter 46 emits a radio frequency signal 47 in a frequency band between 900 and 914 MHZ which is amplitude-modulated with a composite video signal produced by CCD camera 45 in a Video Doorbell Station 31. As was described above, activation of CCD camera 45 and video transmitter 46 is accompanied by emission of an FM RF signal 34 modulated with an annunciator signal containing the identity code of the particular Video Doorbell Station 31 containing the camera. Referring to FIG. 13, "OR" gate 502 receives a command from either keyboard 162 through decimal output 329 of keyboard decoder 164, or the "Q" output 131 of timer 126 via the auto mode switch 501A. The output of "OR" gate 503 energizes relays K1 and K2 via transistor 234. In the "auto mode," when switch 501A is closed, "Q" output 131 of timer 126 is connected to input terminal 501 of "OR" gate 502. When timer 126 begins its interval, "Q" 131 goes true, causing terminal 503 of "OR" gate 502 to become true, energizing relays K1, K2 and diode matrix 222 as earlier described. Input terminal 504 of OR gate 502 is directly controlled by pushbutton 10 (on/off) of keyboard 162, also causing terminal 503 to go true.

First input port 25 of diode matrix 222 is connected to an existing TV antenna or cable 227. Second input 228 of diode matrix 222 is connected to demodulator signal output terminal 228 of AM video receiver 50.

In the absence of receipt of an annunciator signal from a Video Doorbell Station 31, matrix control input terminal 223 resides at a logic zero level, connecting TV monitor C with cable 227 and allowing normal viewing operations. Upon receipt of an annunciator signal from a Video Doorbell Station 31, matrix control input terminal 223 goes to a logic true level, connecting television monitor port 224 of diode matrix 222 with input port 226. This configuration of diode matrix 222 causes a scene viewed by CCD camera 45 to be substituted for an existing program on monitor C.

Output terminal 503 of "OR" gate 502 is also connected to base 235 of a relay-driver transistor 234. Collector 236 of relay-driver transistor 234 is connected to coil 239 of a first relay (K2) 238, and to coil 241 of a second relay 240. First relay 238 has a pair of contacts 242 and 243 which may be connected in series with a source of alternating current and a receptacle 244. Second relay (K1) 240 has a pair of contacts 245, 246 and 248, 249 not permanently connected to a power source. Contacts 248, 249 supply power to video receiver 50 when relay 240 is energized. The purpose of removing power from video receiver 50 is to prevent possible feed-through of extraneous video signals received by the video receiver, which signals might interfere with normal program reception. Live relay contact set 242 and 243, and dry relay contact set 245 and 246 may be used to turn on a time lapse recorder 247, or a monitor and light source, when Video Receiver Station 32 receives an annunciator signal.

FIG. 14 is a schematic diagram of a wireless controller and voice communicator useable in place of Video Receiver Station 32 shown in FIGS. 12 and 13. Wireless controller and voice communicator 250 comprises a self-contained, battery powered, hand-held apparatus that performs most of the functions of the Video Receiver Station depicted in FIGS. 12 and 13 and described above. FIG. 15 shows a relay station which is used in conjunction with the apparatus 250 of FIG. 14. Referring now to FIG. 14, hand-held apparatus 250

includes transceiver 100, a loudspeaker 40, and a microphone 43. Instead of a keyboard 162 of the type shown in FIG. 13, hand-held apparatus 250 uses a modified keyboard 251, as will be described in detail below. When using hand-held communicator 250, a video receiver 50 (FIG. 15) may be connected to a video modulator that produces an RF output signal on an unused channel (Channel 3 or Channel 4), the output of which is connected to antenna input multiplier of a television monitor. Thus, if the monitor is commanded to receive Channel 3, for example, a normal broadcast or cable program will be interrupted and replaced by the video signal received from a Video Doorbell Station 31 by video receiver 50.

Preferably, hand-held communicator 250 utilizes an existing infrared wireless control system of a television monitor which the communicator is used with, to permit remote switching of images displayed on the monitor between existing programs and Video Doorbell Station images. Thus, as shown in FIG. 14, controller/communicator 250 includes an infrared transceiver 252 having an infrared emitting diode (LED) 253 and an infrared-sensitive photodetector 254. LED 253 is used to send control commands to an existing infrared receiver on a television monitor. Photodetector 254 is used to "learn" the proper emitted infrared pulse sequence to command selection of Channel 3 or Channel 4, as will now be described.

The "LEARN" function of infrared transceiver 252 requires the user to press the learn function key for a duration of approximately 10 seconds. This time duration prevents normal button-pressing from accidentally erasing the learned code. Code transference from an existing TV remote controller to hand-held communicator 250 is accomplished by butting the active areas of the two units together, allowing approximately 1 to 6 inches between the two units (this allows for different IR emitter alignments of different models). Simultaneously, the user will press both the Channel 3 or 4 button on the TV remote controller and the learn function key of communicator 250 for the 10-second duration.

Infrared transceiver 252 contains an IR detector, amplifier/limiter, bandpass filter and comparator. The bandpass filter bandwidth is sufficiently broad to accept the variety of pulse patterns emitted by existing IR remote controllers. After the data is recovered as a square wave pulse train, it is inputted to a EEPROM (Electrically Erasable Read Only Memory) that records the pulse sequence. Once recorded, the pulse train may be recalled from the EEPROM by depressing a channel select button on the keyboard of communicator 250, and fed to a LED current driver that in turn may be used to remotely illuminate the infrared receiver of a television monitor. The push button functions of keyboard 251 are:

- #1—Listen
- #2—Talk
- #3—Call-up (turn on and transmit door station video)
- #4—Channel 3 Select T.V.
- #5—Camera sequence
- #6—Camera 1 (home)
- #7—Camera 2 (home)
- #8—Camera 3 (home)
- #9—Camera 4 (home)
- #10—Power On/off
- #11—Learn

#12—VCR pause

Referring now to FIG. 15, receipt of the FM signal causes DO output terminal 113 of serial encoder/decoder 109 of hand-held controller-communicator 250 to go true. Output terminal 113 of serial encoder/decoder 109 is connected to the control input terminal 223 of a diode matrix 222. Diode matrix 222 functions as a SPDT switch, connecting a common output port 224 with a first input port 225, with control input terminal 223 at zero volts, and connecting common output port 224 with a second input port 226, when the control input terminal is at a logic true voltage level. Aside from the fact that the drive signal for diode matrix 222 and relay driver transistor is derived from DO output 113, the operation is exactly as described above for VRS 32, FIG. 12.

FIG. 16 illustrates a telephone interface unit 260 that may be operably interconnected with a video receiver station 32. Major components and functions of telephone interface unit 260 are:

TELEPHONE INTERFACE

DTMF Tone Decoder 261 decodes dual-tone, multi-frequency (DTMF) encoded signal frequencies of a standard TOUCH-TONE telephone 274, and outputs a corresponding 4-bit binary word 408 to input port 165 of keyboard decoder 164. Numbers 1 through 4 are used to call up a selected camera from up to four separate VDBS camera locations. The asterisk (*) sign controls the sequence of the four cameras, while the pound (#) sign allows communication with a particular remote video doorbell station.

Input clamping diodes 262 limit the telephone lines 48-volt DC pulses and 90-volt AC 10-Hz ring pulses to a 5-volt logic signal level required at the input of the tone decoder.

The "Q" output 406 of flip-flop 263 toggles whenever the pound sign (#) is decoded, appearing on output terminal 407 if the DTMF decoder. This signal clocks input 404 of flip-flop 263, which in turn energizes relays K1 and K2 "on" or "off." Flip-flop 263 is reset when the "Q" output 405 of the 60-second "watchdog" timer 402 interval has expired. This in turn forces the "Q" output 406 of flip-flop 263 low, de-energizing K1 and K2 until the pound sign (#) is decoded again. The watchdog timer insures that if the user terminates a telephone conversation verbally, and then accesses the telephone intercom to a remote video station, that after 60 seconds, telephone operations will return to normal. Watch-dog timer 402 begins its interval when triggered input 403 is strobed by strobe line 317 of keyboard decoder 164.

Relay contacts A, B, C, D of K1 relay 240 supply power to the video receiver, direct the telephone's tip and ring, telephone functions to DTMF decoder 261 and audio transceiving, as well as effecting dry contact closures for external switching as described in FIG. 15, contacts 245, 246.

Relay contacts K1-B and K1-C control the phone line status. In their normal state, as shown in FIG. 16, normal phone operations occur and a direct path exists between the phone line feed and telephone, when K1 is energized by transistor 234, FIG. 15. However, K1-B shorts the "ring" and "tip" of the phone line feed, placing a phone caller on "hold," maintaining an "on hook" path. Simultaneously, K1-C connects the "tip" of the telephone to a 12 volt DC source, restoring operation and isolating the telephone from the phone line feed. In addition, load resistor 401 is placed in series with the 12

volt source, dropping the voltage to 10 volts for operation of DTMF telephone encoder, item D, and other normal telephone functions.

When a video doorbell station address is transmitted along with audio voice information by pressing push-to-talk switch 202, the K3 output of serial encoder/decoder 3 109 goes true. This signal in turn switches on drive transistor 271 energizing coil 272 of relay K3 270, closing contact set 273 and transmitting voice communications received by transceiver 100 to the earphone of telephone 274. 10

What is claimed is:

1. An apparatus for acquiring information from a remote location and transmitting said information to a monitoring location, without requiring interconnecting wires between said remote location and said monitoring location, said apparatus comprising; 15

a. a sensor station, said sensor station including means for sensing physical quantities including audio and/or video information within the vicinity of said sensor station, signal transmission means responsive to said sensor means for wireless transmission of said audio and/or said video information to a monitoring location, internal energy storage means for powering said sensor station and coupling means adapting said internal energy storage means to be connected to and be recharged from an electrical power source for powering an annunciator such as a doorbell, said coupling means containing current limiting means whereby said energy storage means may be maintained in a charged state without causing an annunciator connected to said annunciator power source from being actuated, and 20

b. a monitor station, said monitor station including means adapted to receive said information transmitted from said sensor station, means for producing an annunciator signal upon receipt of said information, and transducer means for producing perceptible signals functionally related to said sensed physical quantities, said transducer including means for displaying said transmitted video information on a television monitor. 25

2. The apparatus of claim 1 wherein said sensor station includes means responsive to actuation of a doorbell button connected to said doorbell power source in actuating said audio and/or video sensors, and activating said wireless transmission means. 30

3. The apparatus of claim 1 further including radiation sensing means responsive to the presence of a human being in activating said audio and/or video sensors, and activating said wireless transmission means. 35

4. The apparatus of claim 3 wherein said radiation sensing means is further defined as being an optical sensor. 40

5. The apparatus of claim 3 wherein said radiation sensing means is further defined as being an infrared sensor. 45

6. The apparatus of claim 3 wherein said radiation sensing means is further defined as being an ultrasonic sensor. 50

7. The apparatus of claim 3 wherein said radiation sensing means is further defined as being a microwave sensor. 55

8. An apparatus for acquiring audible and/or visible information from a remote location, transmitting said information to a monitor station, and receiving informa- 60

tion from said monitor station, said apparatus comprising;

a. a sensor station including

(i) sensor microphone,

(ii) a sensor transmitter connected to said microphone, said transmitter adapted to send a wireless signal modulated with audio information received by said sensor microphone,

(iii) detection means adapted to ascertain the presence of a person in the vicinity of said sensor station, said detection means being operably interconnected to said sensor transmitter so as to modulate said wireless signal emitted by said sensor transmitter with a signal signifying said presence of a person,

(iv) a sensor receiver connected to a loudspeaker, said receiver adapted to receive wireless signals modulated with intelligible sounds and emitting reproductions of said sounds from said receiver,

b. a monitor station, said monitor station including (i) a wireless monitor receiver adapted to receive said modulated wireless signal emitted by said sensor transmitter,

(ii) a monitor loudspeaker connected to said monitor receiver for reproducing sounds received by said microphone in said sensor station,

(iii) a microphone,

(iv) a monitor transmitter connected to said microphone, said monitor transmitter being adapted to send wireless signals modulated with audio information received by said monitor microphone, and

(v) control logic responsive to said presence-indicating modulating signal in producing an annunciator signal perceptible in the region of said monitor station. 55

9. The apparatus of claim 8 further including means within said monitor station for selectively coupling audio information received from said sensor station to the earphone of a telephone, in place of audio information from another source.

10. The apparatus of claim 9 further including means within said monitor station for modulating said wireless signal emitted by said monitor transmitter with audio signals received by the microphone of a telephone.

11. The apparatus of claim 8 further including within said sensor station a television camera connected to said wireless transmitter adapted to send a wireless signal modulated with video information received by said television camera.

12. The apparatus of claim 11 further including within said monitor station means for recovering said video information and displaying said information on a monitor.

13. The apparatus of claim 12 further including means for coupling said video information selectively to an existing television monitor, in place of video information from another source.

14. The apparatus of claim 13 wherein said monitor station is further defined as being partitioned into

a. a relay station containing a video receiver selectively coupleable to a television monitor, and

b. a hand-held communicator, said communicator containing said audio transceiver components of said monitor. 65

15. The apparatus of claim 14 wherein said hand-held communicator is further defined as containing infrared transmitter means, whereby the operation of an existing

television monitor may be controlled by infrared signals emitted by said infrared transmitter.

16. The apparatus of claim 15 wherein said hand-held communicator is further defined as including an infrared receiver, associated control logic and memory means, whereby said communicator is adapted to learn the control codes of infrared controllers for existing television monitors, and emulate those codes in a transmitted infrared signal to effect control of said monitors by said communicator.

17. The apparatus of claim 8 wherein said monitor station is further defined as including demodulation means operably connected to said receiver means, said demodulation means being operably connected to annunciator means for indicating to a person in the vicinity of said monitor station the presence of a person in the vicinity of said sensor station.

18. The apparatus of claim 17 wherein said detection means in said sensor station is further defined as being operably interconnected to a doorbell button, whereby depressing said doorbell button causes transmission of said modulated annunciator signal.

19. The apparatus of claim 18 wherein said sensor station contains an internal electrical energy storage means.

20. The apparatus of claim 19 wherein said internal energy storage means is operably interconnected to said doorbell button, whereby an electrical current is drawn from a doorbell power supply, of a magnitude sufficiently large to keep said energy storage means sufficiently charged to permit operation of said apparatus, but sufficiently small to prevent actuation of a doorbell connected to said doorbell power source and said doorbell button, unless said button is actuated.

21. The apparatus of claim 20 wherein said sensor station is further defined as including a wireless receiver.

22. The apparatus of claim 21 wherein said sensor station is further defined as having a loudspeaker operably interconnected to said receiver, whereby voice signals modulating a wireless signal received by said receiver are converted to intelligible sounds and emitted by said loudspeaker.

23. The apparatus of claim 22 wherein said monitor station is further defined as including a wireless transmitter having an output signal effective in being received by said receiver in said sensor station.

24. The apparatus of claim 23 wherein said monitor station is further defined as including a microphone operably connected to said wireless transmitter in said monitor station, whereby sounds received by said microphone in said monitor station modulate the output signal of said wireless transmitter, are received by said receiver in said sensor station, and reproduced at the output of said loudspeaker in said sensor station.

25. The apparatus of claim 24 wherein said monitor station is further defined as including reception control logic whereby reception of a wireless signal from a sensor station causes said monitor station to respond only if said wireless signal is modulated with a coded address corresponding to one of a group of addresses programmed into said monitor station.

26. The apparatus of claim 24 wherein said monitor station is further defined as including transmission control logic whereby said signal transmitted by said monitor station may be modulated by a sensor station address code selected by said monitor station.

27. The apparatus of claim 26 wherein said sensor station is further defined as including command control logic whereby said sensor station is switched from a quiescent state to an information-transmitting state upon reception of a modulated signal from said monitor station containing an address corresponding to an address pre-programmed into said sensor station.

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(19) **United States**(12) **Patent Application Publication**
Klein et al.(10) **Pub. No.: US 2004/0080615 A1**(43) **Pub. Date: Apr. 29, 2004**(54) **DIGITAL VIDEO SECURITY SYSTEM**(52) **U.S. Cl. 348/143; 348/155**(75) **Inventors: Larry Klein, Hashmonaim (IL); Joel Kligman, Toronto (CA)**

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TIONAL INC.**(21) **Appl. No.: 10/644,818**(22) **Filed: Aug. 21, 2003**(30) **Foreign Application Priority Data****Aug. 21, 2002 (CA) 2.399.269****Publication Classification**(51) **Int. Cl.⁷ H04N 7/18; H04N 9/47**

A digital video security system comprises a video module and an event scheduling module for generating signals in response to at least one predefined event, such that the video module renders the video images in response to a signal generated by the event scheduling module. Predefined events include triggering events, such as motion detection, or a scheduled events, such as a preset date and time. Video images are recorded in a time-indexed file format, from which segments of footage may be extracted by reference to a database of time indices relating to the predefined events. Video images taken by the security system may be delivered in near real-time or at a later time using streaming technology. The security system is operable by either a host computer provided with a video camera or a remote computer, which are in communication over a network such as the Internet.

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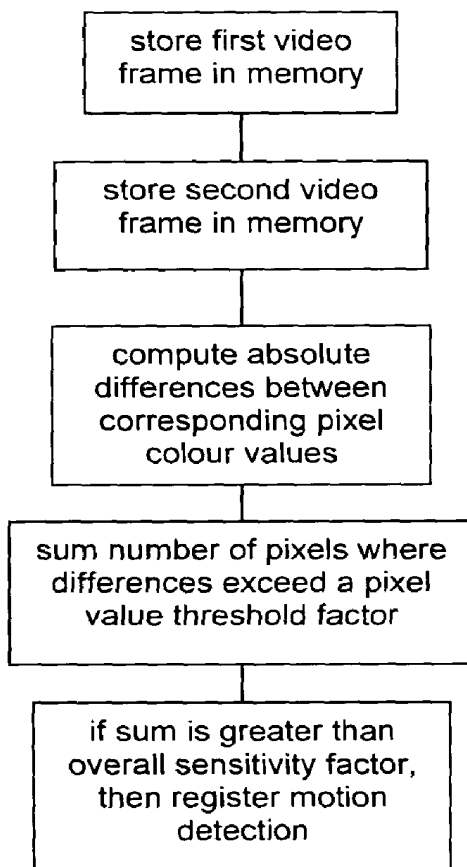


Figure 1

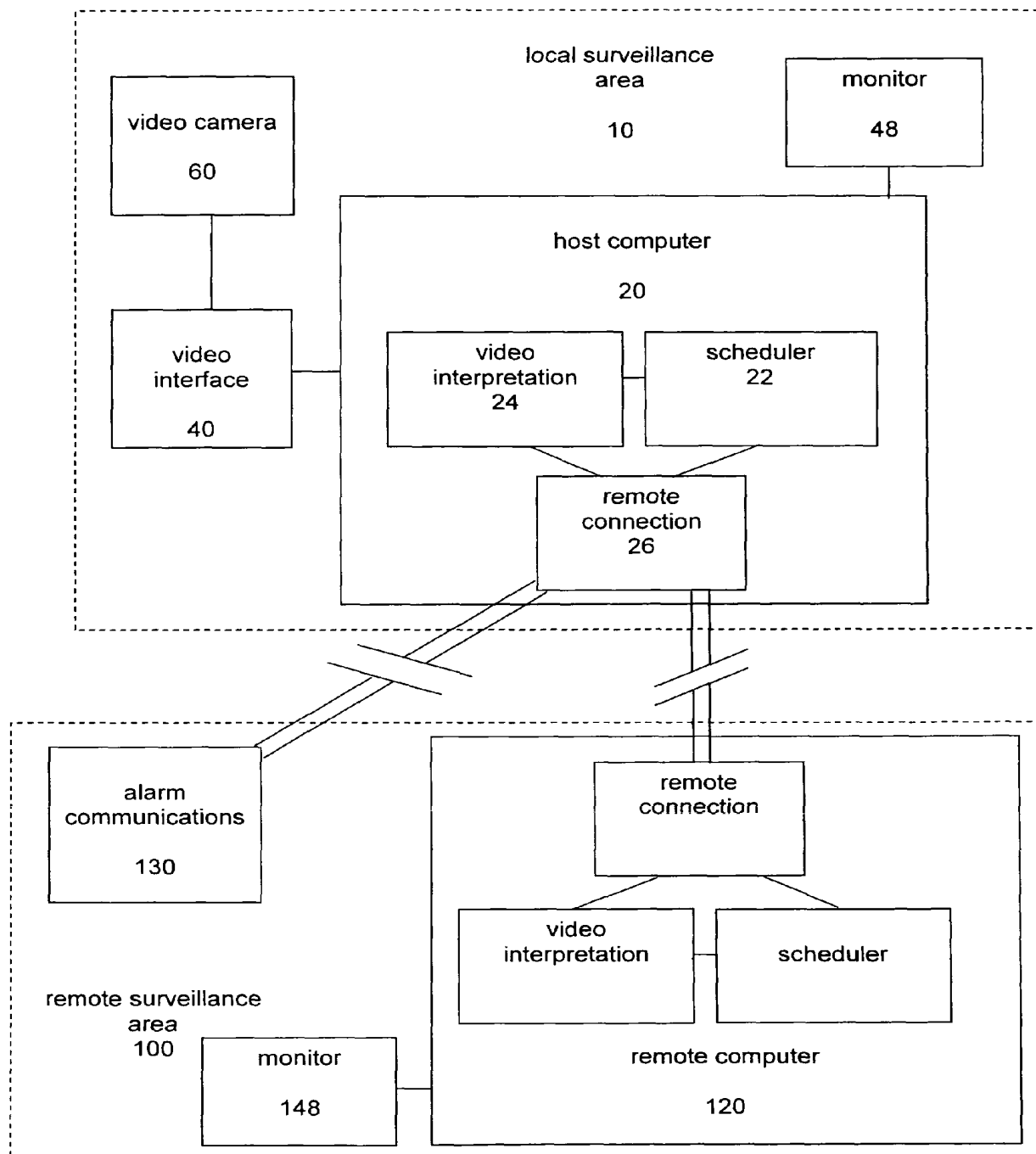


Figure 2

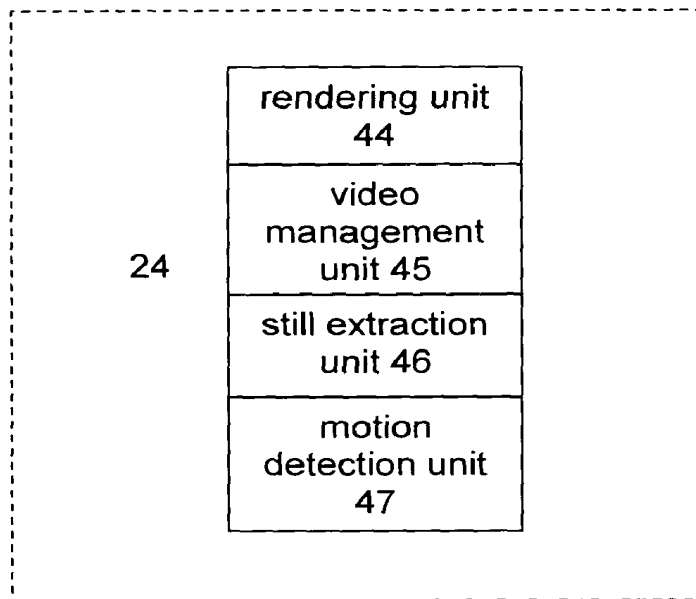


Figure 3

200

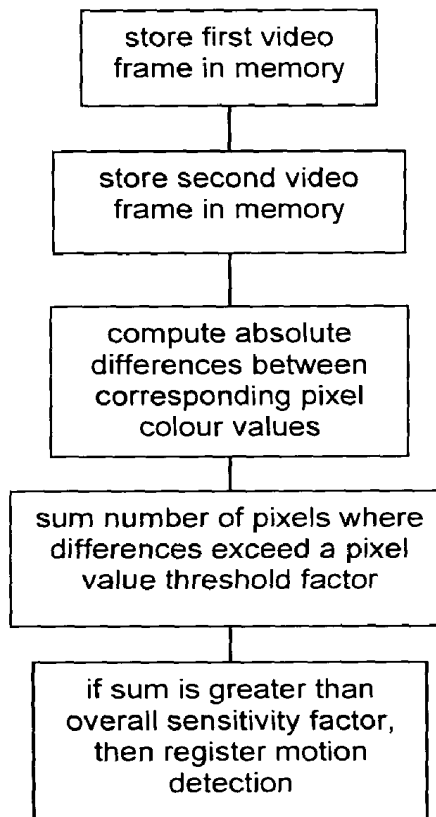
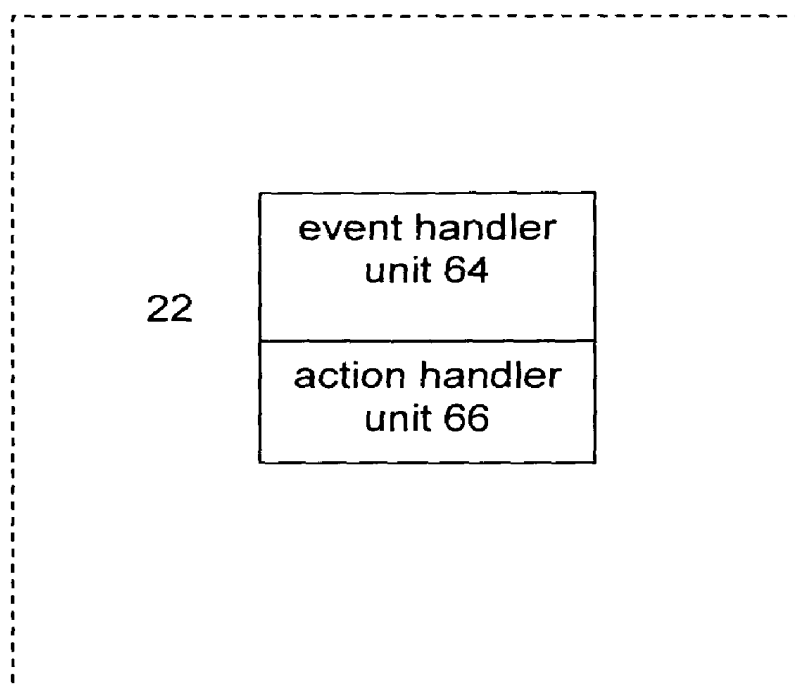


Figure 4



DIGITAL VIDEO SECURITY SYSTEM

FIELD OF THE INVENTION

[0001] The present invention generally relates to security systems, and specifically to remotely operable video surveillance systems.

BACKGROUND OF THE INVENTION

[0002] Many security or surveillance systems employed in homes and businesses incorporate motion detection and video cameras for surveying a protected area.

[0003] Motion detection is typically accomplished through a passive system, such as an infrared detectors which detects changes in temperature in the monitored area, or on an active system such as ultrasonic or microwave sensors which detect moving objects in their field of detection. When motion is detected, a signal is delivered to a monitoring system, which may sound an alarm or report the incident to a security guard station or central service. Such motion detection systems typically require professional installation and may further require adjustment to avoid false reports from natural occurrences such as sunsets or other gradual variations in light quality or intensity.

[0004] Video cameras are used to provide real time or recorded surveillance of a protected area. The feed from the video cameras is usually directed to a monitoring station, such as a security guard station, or a central service, that provides monitoring services to a number of protected areas. If the feed is not monitored in real time, it may be recorded to video tape for future reference. However, a live video feed requires constant monitoring in order to detect security breaches; and when footage is recorded for later viewing, it is not easily correlated with a given event in time. For example, a convenience store security camera may record footage of the store entrance for a period of twelve hours; if a break-in is detected at an undetermined time during that twelve hours, the entire footage may have to be reviewed before the relevant break-in footage is located. Even if the time of the break-in is known, the user must fast-forward through the footage to locate the approximate segment corresponding to the time of the break-in.

[0005] Security systems may further be tied in with certain automated events; for example, when motion is detected, the system may sound an alarm and turn on the lights in the protected area. Configuring a security system to perform such automated events requires that the installer of the system attend on the protected premises to make adjustments to the system on-site; if alterations are to be made to the automated processes carried out by the security system, a further visit by an installer is required to effect those changes.

[0006] Accordingly, it is desirable to provide a security system that overcomes these disadvantages.

SUMMARY OF THE INVENTION

[0007] The present invention provides a digital video security system that is operable in a local surveillance area, and over a computer network in a remote surveillance area. The digital video security system provides means for streaming video to a local computer and to a remote computer, either from video footage taken in real time or from

a prerecorded file, and further provides means for rapidly identifying footage corresponding to a predetermined event, such as a motion detection, preset time, or other event.

[0008] One aspect of the invention provides a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time. Preferably, the video module can record the video images in a file format comprising time-indexed footage, from which segments of footage may be extracted by reference to a database of time indices relating to predefined events. Most preferably, the video images are delivered to the user in near real-time using a communications module, or at a later time using streaming technology.

[0009] Another aspect of the invention provides a method of motion detection through a differencing algorithm that compares a frame of captured video against a previous frame of captured video, or against a historical representation of previously captured video, to determine whether a change in video data outside the scope of preset tolerance levels has occurred.

[0010] The present invention further provides a system for managing a digital video file comprising time-indexed footage recorded by a video camera, having a database containing at least one external time index associated with a predefined event, means for presenting a list of the predefined events to a user, means for the user to select one of the list of predefined events, and means for replaying a portion of the video file that contains time-indexed footage corresponding to the external time index associated with the predefined event selected by the user from the list of predefined events. In a further aspect of the invention, the video file is replayed at a location remote from the video camera, and the means for the user to select one of the list of predefined events is at a location remote from the video camera. Yet another aspect of the invention is means for extracting a still image from the video footage corresponding to the external time index associated with the predefined event.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] In drawings which illustrate by way of example only a preferred embodiment of the invention,

[0012] **FIG. 1** is a schematic representation of a video surveillance system.

[0013] **FIG. 2** is a schematic representation of a video interpretation module.

[0014] **FIG. 3** is a flowchart representation of the image analyzer in the video interpretation module.

[0015] **FIG. 4** is a schematic representation of an event generation module.

DETAILED DESCRIPTION OF THE INVENTION

[0016] Referring to **FIG. 1**, the video surveillance system of the present invention comprises a local video surveillance

connection and an optional remote video surveillance connection. The local video surveillance connection is located in the local surveillance area **10**, which includes the specific area intended to be kept under surveillance.

[0017] A video camera **60** is mounted in a position in the local surveillance area **10** in the desired viewing location. The video camera **60** communicates via wire or wireless means with a video interface **40**, which in turn is connected to a host computer **20**. Preferably, the video camera **60** and the host computer **20** are powered by separate power supplies.

[0018] The host computer **20** includes software to control the recording, interpretation and reaction of the security system to the video input. The control software comprises three main components: a video interpretation module **24**, a task scheduler and event generation module **22**, and a remote communication module **26**. While the components may be separate software objects, they interact with one another to permit full control over the surveillance system.

[0019] The remote communication module **26** provides means for transmitting information between the host computer **20** and at least one remote computer **120** over a network or direct connection, such as the Internet, a local area network, or a modem. The protocol used for transmitting information between the computers **20**, **120** is any suitable protocol known in the field of computer network communications. The remote communication module **26** is activated by the security system whenever communication with a remote computer **120** is required; for example, where the security system must respond to commands issued from the remote computer **120** to issue commands locally to the video interpretation module **24** or the event generation module **22**. The remote communication module **26** can also respond to locally issued commands from the video interpretation module **24** or the event generation module **22**, and take action by issuing external alarm events to a user's choice of remote alarm communications means **130**. Typical alarm communications means include telephone, SMS, pager, electronic mail or video electronic mail.

[0020] The remote communication module **21** further permits a remote connection from a remote computer **120** to the host computer **20** such that the user of the remote computer **120** has full functional access to the software, including viewing the video camera output as a video stream; the ability to edit and add alarm events; and the ability to review and change task scheduler entries.

[0021] Turning to FIG. 2, the video interpretation module **24** comprises a rendering unit **44**, a video management unit **45**, a still extraction unit **46**, and a motion detection unit **47**. The rendering unit **44** receives a feed from the video camera **60** via the video interface **40**, and renders the feed to a monitor **48** associated with the host computer **20**. The rendering unit **44** delivers the feed to the monitor **48** in real time, thus allowing a user at the host computer **20** to maintain live surveillance of the local surveillance area **10**. If a user is stationed at a remote computer **120**, then the rendering unit **44** delivers the video feed to the monitor **148** associated with the remote computer **120** by means of the remote communication module **26**. Such a video feed is delivered to the user at the remote computer **120** in near real time. Preferably, the video feed is delivered using a streaming file format, such as Microsoft® Windows Media format.

Most preferably, a microphone (not shown) is also set up in the local surveillance area **10** along with the video camera **60**, such that the video feed rendered by the rendering unit **44** comprises sound. In another preferred embodiment, more than one camera **60** is connected to the host computer **20** and the feeds are received by the host computer **20** and rendered by the rendering unit **44** simultaneously, such as in a quad-screen format.

[0022] The security system software preferably includes access control means in the remote connection module **26** in order to maintain the security and integrity of the system. The access control requires the entry of a username and password in order to gain access to the features of the security surveillance system. Most preferably, a further encryption or scrambling algorithm is applied by the video module **24** to each frame of the video feed, to ensure that the video data transmitted from the host computer **20** to a remote computer **120** will be secure and unreadable by third parties. Such an algorithm may be implemented using an industry standard encryption algorithm, such as one of those available in the Microsoft® Windows Media® Rights Manager Software Development Kit (SDK). The remote computer **120** would therefore be provided with a decryption or descrambling key in order to descramble the video feed streamed from the host computer **20**.

[0023] The video management unit **45** provides a management system for recording the video feed received by the camera **60** to a local storage medium associated with the host computer **20**, or alternatively with a storage medium associated with the remote computer **120** by means of the remote communication module **26**.

[0024] The video management unit **45** includes a database for recording associated event information with each video file stored by the video management unit **45**. The event information includes information pertaining to the triggering event or scheduled task, described below, that caused a video file to be stored; the start and stop times of the video file; and any further triggering events or scheduled tasks that occurred between the start and stop signs. This database means enables the user to manage the surveillance video information and locate important events within a video file. For example, the video management unit **45** may record a 2 hour-long video file as a result of a scheduled task to record video during that time; during the two hours, a triggering event, such as a motion detection, described below, may occur which may normally trigger the video management unit **45** to record the video feed in any case. The database in the management unit **45** would contain external time references to both the commencement and ending of the 2-hour-long period, as well as an external time reference to the motion detection. The video management unit **45** may then use the external time reference in the database to locate the specific point in the stored video when the motion detection occurred, and then present that particular video clip to the user.

[0025] The still extraction unit **46** provides means for extracting and printing a still shot from a video file.

[0026] The motion detection unit **47** comprises an image analyzer that detects motion by comparing the current video frame with the preceding video frame or a video frame history. Referring to the flowchart **200** shown in FIG. 3, the first video image frame in the video stream received by the

host computer **20** is saved into an array in memory. The next video image frame is also saved into an array in memory. Regions of interest, smaller sub-arrays within each image array, are defined to speed calculation and focus analysis on specific areas in the image.

[0027] The value of each pixel from the first video image within a region of interest is compared with the value of the corresponding pixel in the next video image. The pixel values, preferably their greyscale or colour channel values (for example, grayscale and red/green/blue values ranging between 0 and 255), are compared. By summing the absolute value of the difference between the pixel values within each region of interest, a value representing the change in the image content is obtained. The greater the change in the image content, the larger the magnitude of the summed pixel differences.

[0028] Since digital cameras are prone to statistical variations in output, several threshold factors are applied to ensure that a change in pixel value is due to a change in content as opposed to a random fluctuation in pixel value, for example due to ambient light fluctuations. The first threshold factor is an overall sensitivity factor applied to the whole image or region of interest. This factor ensures that the overall image content must change by a certain amount in order for a motion detection alarm to be generated. Its effect is to require motion of an object of some minimum size within the image. The factor is applied by requiring some number of pixels, such as 5%, to change before a motion detection alarm is generated. A maximal sensitivity factor is also applied to ensure that the overall change in image content does not exceed a predetermined value, such as 99%. In the case of a sudden change that does not constitute an alarm condition, such as turning on or off the ambient lighting, applying the maximal sensitivity factor will thus eliminate false alarms.

[0029] The second threshold factor, the pixel value threshold, is applied at the pixel level. This factor requires that the change in the pixel values for each of the colour channels from one image to the next must be greater than some threshold amount. If the change is less than some threshold then this indicates the change is due to random statistical fluctuation, or a minor change in lighting conditions.

[0030] Certain environmental factors, such as the refraction of sunlight on glass, can lead to false motion detection. To account for this phenomenon, a smoothing algorithm is preferably incorporated into the image analyzer. Rather than simply subtracting the pixel values of the last image from the current image, the analyzer uses the pixel values from the last N frames (where N is preferably 5). The range in pixel values creates a dynamic threshold which may be larger than the set pixel value threshold. If a pixel value is fluctuating, then changes within that range will not be considered to amount to a change in the pixel value for motion detection purposes.

[0031] There are thus four features implemented to minimize the incidence of false alarms. The analyzer divides the image into smaller regions of interest. A sensitivity factor is used to ensure that the change in the overall image content, the net image difference magnitude, is greater than some threshold value. In addition to an imager-wide threshold value, each pixel value must vary by more than a threshold amount in order for a difference to be recorded for that pixel

location. Finally, a history of the past N frames is kept. This permits the use of a moving average of past pixel values, avoiding short-term random fluctuations from triggering a false alarm.

[0032] In a preferred embodiment, additional features may be activated to increase the processing speed associated with the image analyzer, although at the cost of accuracy. The image analyzer may be set to only execute its routine on every Nth frame, rather than on every frame received from the video camera **60**. The image analyzer may also be set to only operate on select pixels within the region of interest, such as every Nth pixel, instead of on all pixels in the region.

[0033] Turning to **FIG. 4**, the event generation module **22** comprises an event handler unit **64** and an action handler unit **66**. Events are either triggered events or scheduled events. Triggered events arise upon the activation of a predetermined, but unpredictable trigger or alarm such as a motion detection identified by the video rendering unit **44**. Scheduled events are predetermined and predictable, since their occurrence is defined by the user in the event generation module **22**. A scheduled event may include a preset date and time. All events are recorded by the event generation module **22** with an inherent time component.

[0034] Actions are occurrences that are caused by events, and can include operations carried out by the video management unit **45**, such as saving a video feed to a file, or operations carried out by the remote communications module **26**, such as dispatching an electronic mail message or dialing a pager.

[0035] The event generation module **22** and the video management unit **45** thus provide automatic control over video recording and analysis. The video interpretation module **24**, through its motion detection unit **47**, can generate an alarm event in response to a change in the local surveillance area **10**. Upon the detection of this alarm event by the event handler unit **64**, the event generation module **22** directs the action handler **66** to take some action; for example, to send an electronic mail message to the remote computer **120** in order to advise a remote user of a possible break and enter in the local surveillance area **10**. The remote computer **120** may be a central service, such as a security company, which monitors several local surveillance areas **10**; most preferably, the remote communication module **26** is a duplex system which allows the user at the remote computer **120** to not only view the intruder at the local surveillance area **10** via the streaming near real time video provided by the rendering unit **44**, but is also provided with a speaker system in the local surveillance area **10** (not shown) to allow the remote user to speak to the intruder.

[0036] The event generation module **22** through the action handler **66**, upon detection of an alarm event, may further instruct the video management unit **45** to commence recording of the video feed for future references, and also most preferably operate certain automated devices in the local surveillance area using an automation protocol such as the X-10 protocol. The host computer **20** would therefore also be connected to a device controller, such as a CM17a X-10 controller (not shown), which when activated transmits an RF signal to a receiver connected to an electrical circuit in the local surveillance area **10** in order to activate an appliance, such as turn on a light fixture. Thus, the event generation module **22** can act as a trigger for video capture;

a support mechanism to aid video capture, by turning on lighting; or as a response mechanism to take action as a result of the analysis of a video capture event.

[0037] In operation, the security system is provided with a software management system with a graphical user interface to provide control and direction of the security system to the user. The system combines several diverse capabilities to provide a fully functional and useful security system within a single piece of software.

[0038] The system incorporates an interface for connecting a digital camera to a computer. Through this interface a user is able to monitor the camera, record images or a video stream directly to the hard disk and later playback those files. For ease of installation, the security system preferably employs plug-and-play technology to allow an unsophisticated user to install the system with a minimum of difficulty. A user first connects the video camera 60 to a personal computer operating as the host computer 20, through a USB port for example. The software will recognize the camera 60 and enable the user to view the video feed from the camera 60. The user may then adjust the camera 60 viewing angle to include areas of interest for monitoring, such as a cash register or an entry door.

[0039] Once the camera 60 is installed on-site and connected to the host computer 20, the event scheduling module portion 22 of the software provides the user with the option to set a variety of tasks to be automated. The scheduling module 22 directs all automated operation of the security system. The user may define a trigger event such as a motion detection alarms for specific starting and ending times, for specified days of the week (individual days, or weekends and weekday evenings, for example). For each motion detection alarm, at least one action is defined; for example, one or more of the actions of sending an e-mail notification to a designated address; dialing a phone number associated with a telephone, pager, or personal digital assistant; capturing and recording the detected motion on video; operating appliances, or turning on/off light fixtures in the local surveillance area may be associated with the alarm.

[0040] Preferably, the an e-mail action is defined to include the attachment of a frame of the captured video, or even a video clip, to the e-mail message. If a video clip is attached to the e-mail message, then the host computer must be configured to record video mages for a set period of time following the motion detection alarm, but before the e-mail message is sent.

[0041] The system may also activate automated devices or circuits upon the triggering of a motion detection alarm. Preferably, devices are controlled by an automation protocol such as the X-10 protocol.

[0042] By way of example, the event scheduling module 22 may be set to respond to a motion detection at an entry door between 5 pm and 8 am on weekdays. Any motion detected in that window would trigger an alarm event in the scheduling module 22, causing the module 22 to direct the video module 24 to record video until the motion has ceased (or for a predetermined time, such as a half hour period). The events is preferably indexed into the recorded video file, if the file format supports such indexing, or is indexed in a database maintained by the video management unit 45. The user could also instruct the event scheduling module 22 to

send an alert, via e-mail, pager, phone or video e-mail if the motion detection event occurred after 10 pm and before 6 am. The scheduler 22 would then also initiate an action in the form of an alarm via the user's choice of remote communication 130. Thus, a log would be generated for normal after-hours entry and an alarm raised for entries outside of normal hours.

[0043] The user may connect remotely to the host computer 20 to view the video feed, or adjust scheduling parameters in the event scheduler 22. Preferably this would require setting up a username and password within the remote communication module 26 of the host computer 20. If the host computer 20 is connected to the Internet, the user can install the software on a remote computer 120 also connected to the Internet and access the host computer 120 over that network. After logging on to the host computer 20, the user has full functional access over all software controls. The user may thus access the scheduling module 22 to edit previously scheduled events or add new events to the module 22, or edit or add trigger events and their corresponding actions. For example, the user may change an alarm notification action from a pager to an e-mail. Furthermore, through the remote communication module 26, the user may have remote access to both near real time streaming video and stored archival video files on the host computer 20. Since indexing is stored in the video file, the remote computer 120 will also provide access to the logs generated by the scheduling module 22 and the database management of the video files in the video management unit 45.

[0044] The surveillance system may further perform scheduled events. These events may include the actions described above in the context of the motion detection alarm, such as sending an e-mail to a predetermined recipient or turning on or off light fixtures. The events may also include activating or deactivating other X-10 controlled devices.

[0045] Various embodiments of the present invention having been thus described in detail by way of example, it will be apparent to those skilled in the art that variations and modifications may be made without departing from the invention. The invention includes all such variations and modifications as fall within the scope of the appended claims.

We claim:

1. A system for operating a digital video security system comprising:

a video module for rendering video images captured by a video camera, and

an event scheduling module for generating signals in response to at least one predefined event,

wherein the video module renders said video images in response to a signal generated by the event scheduling module.

2. The system of claim 1, wherein said predefined event includes a triggering event or a scheduling event.

3. The system of claim 2, wherein said predefined triggering event includes motion detection or the activation or deactivation of an appliance.

4. The system of claim 3, wherein said scheduled event includes a preset time for commencing a video recording.

5. The system of claim 4, wherein said video module includes means for recording the video images in a video file.

6. The system of claim 5, wherein said video file comprises a time-indexed representation of said video images.

7. The system of claim 6, wherein the video module comprises database means containing at least one external time index corresponding to at least one portion of said video file, the external time index further corresponding to the at least one predefined event.

8. The system of claim 7 further comprising a communications module for transmitting said video images to a remote computer using streaming technology.

9. The system of claim 1 further comprising a communications module for communicating with a remote computer.

10. The system of claim 9 wherein the remote computer is provided with a video module for rendering video images captured by a video camera, an event scheduling module for generating signals in response to at least one predefined event, and a communications module for communicating with another computer, wherein the remote computer is operable to control the security system.

11. The system of claim 8 wherein the video module further comprises means for motion detection.

12. A system for managing a digital video file associated with a security system, the digital video file comprising time-indexed footage recorded by a video camera, comprising:

a database comprising at least one external time index associated with a predefined event,

means for presenting a list of the predefined events to a user,

means for the user to select one of the list of predefined events,

means for replaying a portion of the video file, the portion of the video file comprising time-indexed footage corresponding to the external time index associated with the predefined event selected by the user from the list of predefined events.

13. The system of claim 10 wherein the video file is replayed at a location remote from the video camera.

14. The system of claim 11 wherein the means for the user to select one of the list of predefined events is at a location remote from the video camera.

15. The system of claim 12 further comprising means for extracting a still image from said time-indexed footage corresponding to the external time index associated with the predefined event.

16. The system of claim 13 wherein the predefined event is a motion detected by the said video camera.

17. A method of detecting motion using a digital video camera comprising the steps of:

(a) receiving a first frame comprising an array of pixels from the video camera;

(b) receiving a second frame comprising an array of pixels from the video camera;

(c) comparing the colour values in each pixel on the second frame against the colour values in the corresponding pixel in the first frame, and if the differences between said first and second frames for all colour

values associated with a pixel are greater than a first tolerance value, registering a change in association with that pixel;

(d) comparing the total number of pixels in the second frame for which a change is registered against a second tolerance value, and if said total number exceeds said second tolerance value, registering a motion detection.

18. A method of detecting motion using a digital video camera comprising the steps of:

(a) calculating average colour differential values for each of an array of pixels from a series of frames previously received from the video camera;

(b) receiving a first frame comprising an array of pixels from the video camera;

(c) receiving a second frame comprising an array of pixels from the video camera;

(d) comparing the colour values in each pixel on the second frame against the colour values in the corresponding pixel in the first frame, and if the differences between said first and second frames for all colour values associated with a pixel are greater than a first tolerance value and greater than the corresponding average colour differential value, registering a change in association with that pixel;

(e) comparing the total number of pixels in the current frame for which a change is registered against a second tolerance value, and if said total number exceeds said second tolerance value, registering a motion detection.

19. A security system comprising:

a digital video camera,

a host computer operably connected to the camera to receive video images from the camera, and

at least one remote computer in communication with the host computer over a network,

wherein the host computer streams video images to the remote computer in Microsoft Windows Media format.

20. A security system comprising:

a digital video camera,

a host computer operably connected to the camera to receive video images from the camera, and

at least one remote computer in communication with the host computer over a network,

wherein the host computer delivers the video images to the remote computer in a streamed video format.

21. The security system of claim 17 wherein the streamed video format is a Microsoft Windows Media system format.

22. The security system of claim 17 wherein the host computer receives video images from the camera in response to a signal generated in response to a predefined event.

23. The security system of claim 19 wherein the predefined event is associated with an event time index and the video images are associated with a series of time indices, and the system further comprises means for identifying a video image with an associated time index matching an event time index.

24. The security system of claim 17 wherein the video images are optionally delivered in near real time to the remote computer or at a time later than the time at which the video images are received by the host computer.

25. The security system of claim 20 wherein the event time index is the time associated with a motion detection.

26. The security system of claim 22 wherein the motion detection is detected by the digital video camera.

27. A method for maintaining surveillance of a surveillance area, comprising the steps of:

- (a) providing a host computer with a security system comprising a video module for rendering video images captured by a video camera, an event scheduling module for generating signals in response to at least one predefined event, wherein the video module renders said video images in response to a signal generated by the event scheduling module, and a remote connection

module for communicating with another computer over a network;

- (b) providing a remote computer connected to the host computer over a network, the remote computer being provided with a security system comprising a video module for rendering video images captured by a video camera and retrieving images captured by a video camera, an event scheduling module for generating signals in response to at least one predefined event, and a remote connection module for communicating with the host computer over the network;

wherein signals generated by the event scheduling module on the remote computer are receivable by the host computer such that the video module on the host computer renders said video images.

* * * * *

- U.S. Patent No. 5,428,388 (hereinafter *Von Bauer*) (Exhibit B)
- U.S. Patent Application Publication No. 2004/0080615 (hereinafter *Klein*) (Exhibit C)
- WO 01/93220 (hereinafter *Menard*) (Exhibit D)

1. A doorbell monitoring system comprising:	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i> , 4:28-34.
a doorway having an environment; a doorbell located in the doorway, the ringing of the doorbell being a triggering event;	<p>“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building.” – <i>Von Bauer</i>, Abstract.</p> <p>“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u>, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>
a video camera and an external microphone disposed in the entry point, the video camera and external microphone, responsive to the triggering event, for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications;	<p>“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building. A microphone and television camera in the sensor station modulate signals, preferably of radio frequency, emitted by a wireless transmitter in the sensor station.” – <i>Von Bauer</i>, Abstract</p> <p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing</p>

	<p>station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p> <p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“In one embodiment, the method includes communicating a video image between the module and the device.” – <i>Menard</i>, 7:4-6.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
an external speaker disposed in the entry point, the external speaker for rendering received cellular audio communications;	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and <u>outputted from a loudspeaker in the sensing station</u>, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>
a control unit disposed in communication with the video	<p>“An embodiment of present system 100 is depicted in Figure 1 and includes module 200, long distance communication ("LD comm") module 250, communication and monitor</p>

<p>camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and</p>	<p>service facility ("facility") 300, and personal data unit ("PDU") 400. Module 200 is in wireless communication with LD comm module 250 via link 215. LD comm module 250 is also in wireless 25 communication with facility 300 via link 210 and in wireless communication with PDU 400 via link 225. Facility 300 is in communication with PDU 400 via link 215. In addition, module 200 is in wireless communication with PDU 400 via link 220 via link 220." – <i>Menard</i>, 12:20-28.</p>
<p>a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.</p>	<p>"Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system." – <i>Von Bauer</i>, 4:24-27</p> <p>"Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u>" – <i>Von Bauer</i>, 5:6-18</p> <p>"Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system." – <i>Von Bauer</i>, 4:28-34</p>

8. A method for providing doorbell monitoring, the method comprising:	“An object of the present invention is to provide a system for communicating information from a remote location to a monitoring location, without requiring interconnecting wires between the respective locations.” – <i>Von Bauer</i> , 3:41-44
ringing of a doorbell at an entry point;	“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u> , or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i> , 5:6-18
responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;	“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i> , 5:6-18
relaying at least a portion of the captured visual and audio communications to a cellular phone;	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p> <p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p>

	<p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“In one embodiment, the method includes communicating a video image between the module and the device.” – <i>Menard</i>, 7:4-6.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
<p>rendering the least a portion of the captured visual and audio communications at the cellular phone;</p>	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“One aspect of the invention provides a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.” <i>Klein</i>, [0008].</p>

	<p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“A user, equipped with PDU 400 can respond in a number of ways. In one embodiment, the user may elect to open an audio communication channel 20 by entering a command using PDU 400. Upon opening an audio communication channel, the caller and user can engage in bidirectional verbal discourse. In one embodiment, the user may opt to receive a graphical image of the caller using PDU 400. Entry of an appropriate command causes exterior module 200D to capture an image using exterior video camera 370 and transmit said image to 25 PDU 400. The graphical image may include a still image or real-time video images.” – <i>Menard</i>, 21:18-26.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
capturing audio communications at the cellular phone;	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p>
relaying the audio communications from the cellular phone to the entry point; and	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u>” – <i>Von Bauer</i>, 5:6-18</p>

	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p>
rendering the audio communications at the entry point.	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and <u>outputted from a loudspeaker in the sensing station</u>, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>

14. A doorbell monitoring system comprising:	<p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p>
a doorbell located at an entry point;	<p>“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building.” – <i>Von Bauer</i>, Abstract</p>
means, responsive to the ringing of the doorbell, for capturing visual and audio communications at the entry point;	<p>“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u>, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>

<p>means for relaying at least a portion of the captured visual and audio communications to a cellular phone;</p>	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p> <p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“In one embodiment, the method includes communicating a video image between the module and the device.” – <i>Menard</i>, 7:4-6.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
<p>means for rendering the least a portion of the captured visual and audio communications at the cellular phone;</p>	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p>

	<p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“One aspect of the invention provides a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.” <i>Klein</i>, [0008].</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“A user, equipped with PDU 400 can respond in a number of ways. In one embodiment, the user may elect to open an audio communication channel 20 by entering a command using PDU 400. Upon opening an audio communication channel, the caller and user can engage in bidirectional verbal discourse. In one embodiment, the user may opt to receive a graphical image of the caller using PDU 400. Entry of an appropriate command causes exterior module 200D to capture an image using exterior video camera 370 and transmit said image to 25 PDU 400. The graphical image may include a still image or real-time video images.” – <i>Menard</i>, 21:18-26.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
means for capturing audio communications at the cellular phone;	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p>

means for relaying the audio communications from the cellular phone to the entry point; and	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – Von Bauer, 4:28-34
means for rendering the audio communications at the entry point.	“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u> ” – Von Bauer, 5:6-18

19. A system for providing doorbell monitoring, the system comprising:	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – Von Bauer, 4:28-34
a doorway to a home having an environment;	“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building.” – Von Bauer, Abstract
a doorway located in the doorway, the ringing of the doorbell being a triggering event;	“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u> , or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – Von Bauer, 5:6-18
a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the	“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building. A microphone and

triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

television camera in the sensor station modulate signals, preferably of radio frequency, emitted by a wireless transmitter in the sensor station.” – *Von Bauer*, Abstract

“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building.

Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – *Von Bauer*, 5:6-18

“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – *Von Bauer*, 4:24-27

“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – *Von Bauer*, 4:28-34

“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – *Menard*, 20:13-17.

“In one embodiment, the method includes communicating a video image between the module and the device.” – *Menard*, 7:4-6.

“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – *Menard*, 16:24-26.

<p>a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway; an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;</p>	<p>“As was described above, activation of a Video Doorbell Station 31 from a standby mode to an operating mode may be initiated by depressing doorbell button 37. Video Doorbell Station 31 desirably incorporates alternate means of being switched from a standby mode to an operating mode. Thus, as shown in FIG. 13, Video Doorbell Station 31 includes a "human presence sensor" (preferably an infrared proximity detector) 38 having a field of view encompassing a desired region, near the entrance of a building, for example.” – <i>Von Bauer</i>, 13:10-19.</p>
<p>a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and</p>	<p>“An embodiment of present system 100 is depicted in Figure 1 and includes module 200, long distance communication ("LD comm") module 250, communication and monitor service facility ("facility") 300, and personal data unit ("PDU") 400. Module 200 is in wireless communication with LD comm module 250 via link 215. LD comm module 250 is also in wireless 25 communication with facility 300 via link 210 and in wireless communication with PDU 400 via link 225. Facility 300 is in communication with PDU 400 via link 215. In addition, module 200 is in wireless communication with PDU 400 via link 220 via link 220.” – <i>Menard</i>, 12:20-28.</p>
<p>a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor</p>	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27.</p> <p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u>” – <i>Von Bauer</i>, 5:6-18.</p>

the home while away and the homeowner and individual to communicate as if the homeowner was at home.	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i> , 4:28-34.
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(54) **SECURITY SYSTEM AND METHOD FOR USE OF SAME**

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(58) **Field of Classification Search** **340/541, 340/506, 539.1; 348/152, 140.1; 455/556.1**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,861,804 A	1/1999	Fansa et al.
5,907,352 A	5/1999	Gilley
6,023,223 A	2/2000	Baxter, Jr.
6,049,353 A	4/2000	Gray
6,060,994 A	5/2000	Chen
6,073,192 A	6/2000	Clapp et al.
6,094,213 A	7/2000	Mun et al.
6,097,429 A	8/2000	Seeley et al.
6,226,031 B1	5/2001	Barracough et al.
6,271,752 B1	8/2001	Vaios
6,429,893 B1	8/2002	Xin
6,466,261 B1	10/2002	Nakamura

6,476,858 B1	11/2002	Ramirez Diaz et al.
6,542,078 B2	4/2003	Script et al.
6,590,604 B1	7/2003	Tucker et al.
6,658,091 B1 *	12/2003	Naidoo et al. 379/37
6,661,340 B1	12/2003	Saylor et al.
6,714,237 B2	3/2004	Lee et al.
6,727,811 B1	4/2004	Fendis
6,753,899 B2	6/2004	Lapalme et al.
6,778,084 B2 *	8/2004	Chang et al. 340/541
6,873,261 B2	3/2005	Anthony et al.
6,965,313 B1	11/2005	Saylor et al.
7,015,943 B2	3/2006	Chiang
7,020,474 B2	3/2006	Scott
7,030,752 B2	4/2006	Tyroler
7,030,753 B2 *	4/2006	Hentz et al. 340/531
7,034,681 B2	4/2006	Yamamoto
7,193,644 B2 *	3/2007	Carter 348/14.06
2006/0022816 A1	2/2006	Yukawa

* cited by examiner

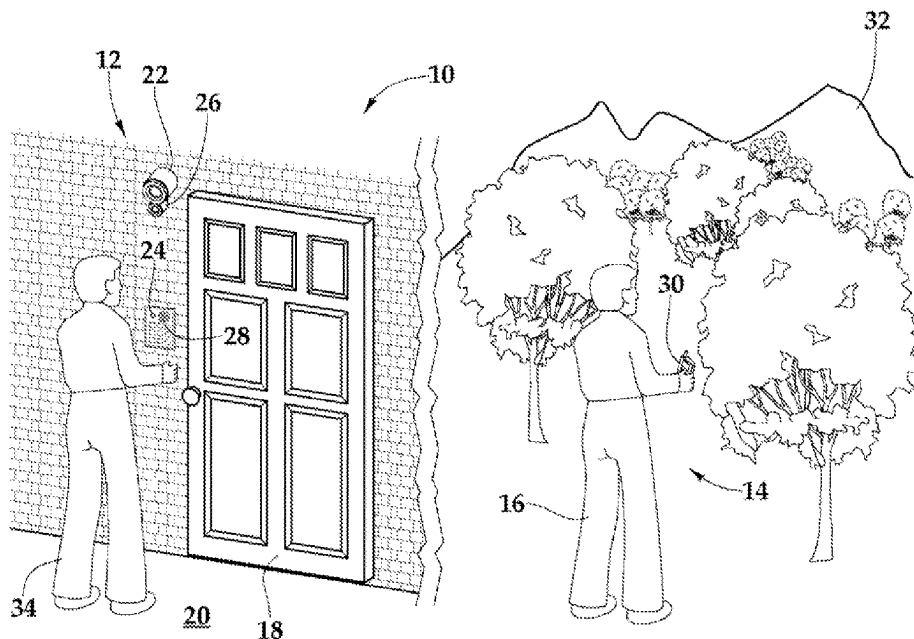
Primary Examiner—Toan N Pham

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(57) **ABSTRACT**

A security system and method for use of the same are disclosed that provide for remote surveillance. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point.

20 Claims, 3 Drawing Sheets



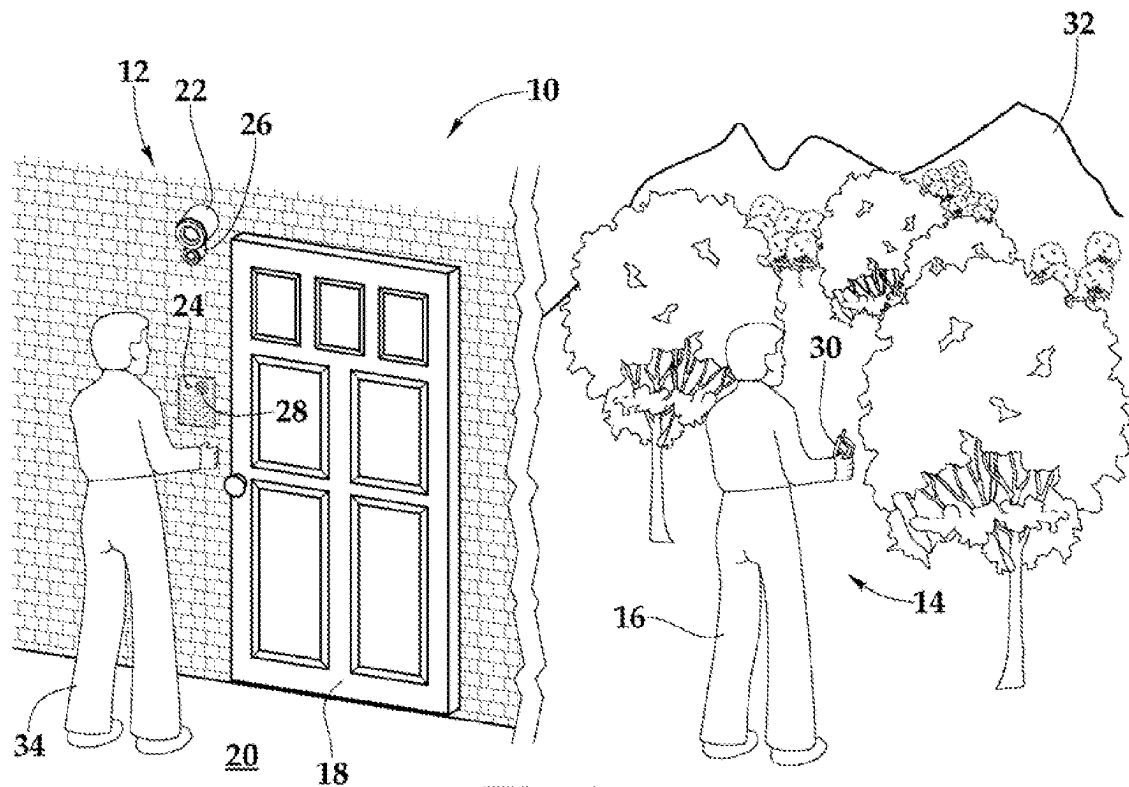


Fig.1

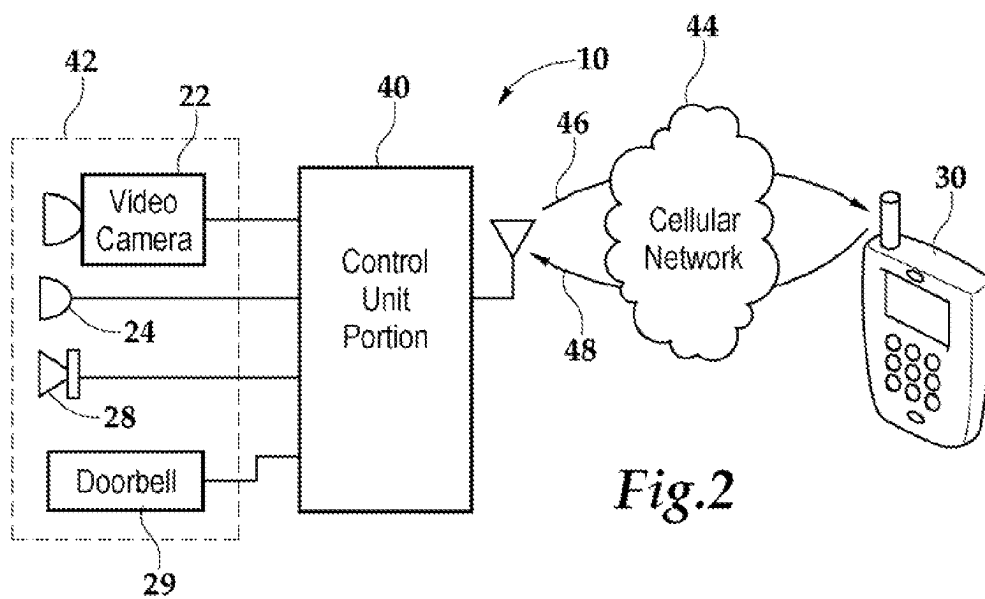
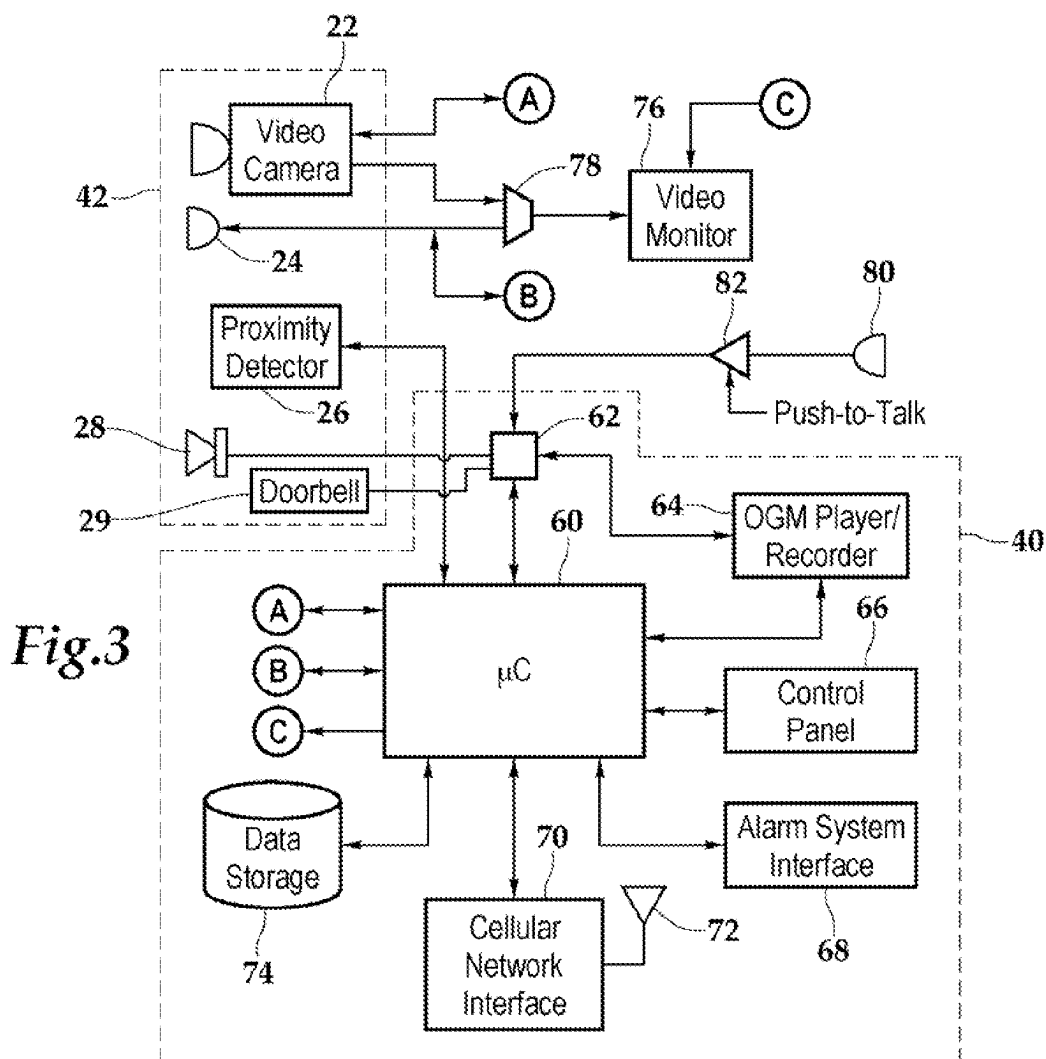
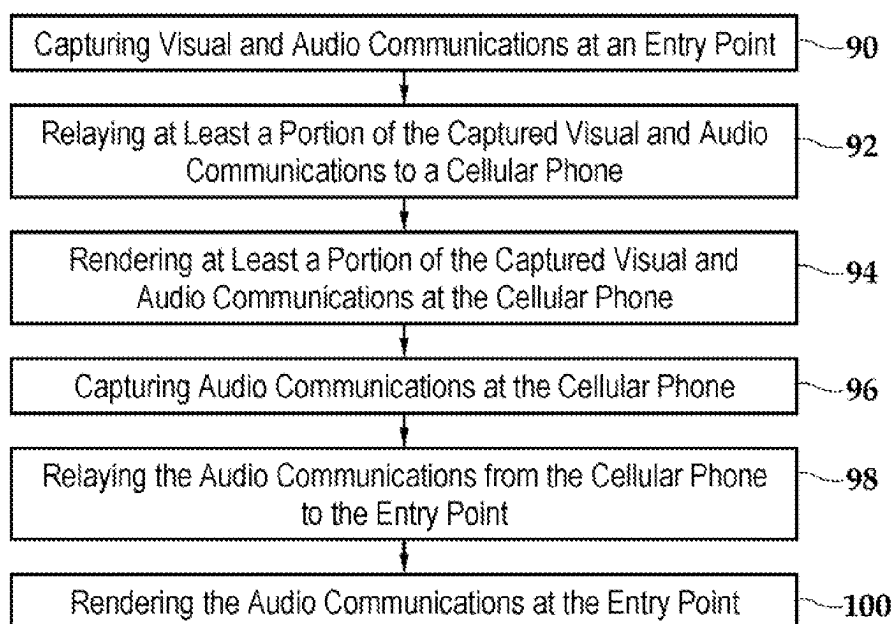
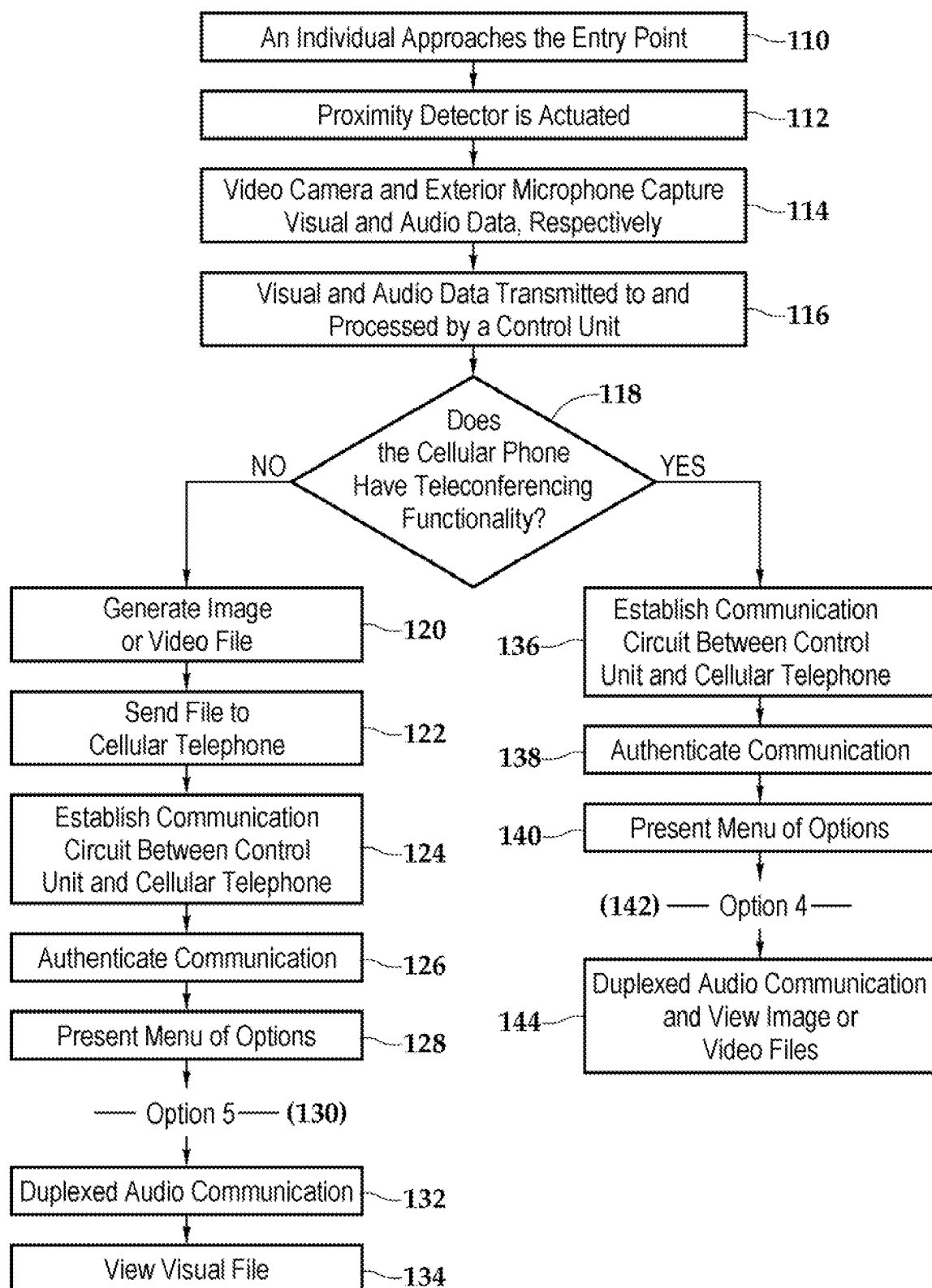


Fig.2



*Fig.5*

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SECURITY SYSTEM AND METHOD FOR USE OF SAME

TECHNICAL FIELD OF THE INVENTION

This invention relates, in general, to security systems and, in particular, to a security system and accompanying method for use of the same for providing remote surveillance and communication with a doorway or other point of entry.

BACKGROUND OF THE INVENTION

Security systems are typically used to monitor alarms and connect an onsite control unit to a predetermined third party. For example, security systems may utilize a direct phone wire (or tamper-resistant fiber optic cable) to connect the control unit to a third party security monitoring service or, in some high end systems, to a first responder via. Onsite speaker phones allow for the third party to speak with the intruder. In the instance of an actual break-in, the speaker phone may be used to sound an alarm or to allow a person to urge the intruder to cease and desist as response units have been dispatched. These existing security systems are reactive, however, and a need exists for a security system that provides a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

SUMMARY OF THE INVENTION

A security system and method for use of the same are disclosed that provide for remote surveillance of an entry way of a property in order to deter potential burglars and other unwanted individuals. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone, respectively, to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point. The systems and methods presented herein thereby provide a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the features and advantages of the present invention, reference is now made to the detailed description of the invention along with the accompanying figures in which corresponding numerals in the different figures refer to corresponding parts and in which:

FIG. 1 is a perspective illustration of an entry point equipped with one embodiment of the security system described herein and a remote location wherein an individual is utilizing the security system to monitor the entry point;

FIG. 2 is a functional block diagram of one embodiment of the security system;

FIG. 3 is a functional block diagram of one embodiment of communication and control units which form portions of the security system;

FIG. 4 is a flow chart depicting one embodiment of a method for providing security; and

FIG. 5 is a flow chart depicting another embodiment of a method for providing security.

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DETAILED DESCRIPTION OF THE INVENTION

While the making and using of various embodiments of the present invention are discussed in detail below, it should be appreciated that the present invention provides many applicable inventive concepts which can be embodied in a wide variety of specific contexts. The specific embodiments discussed herein are merely illustrative of specific ways to make and use the invention, and do not delimit the scope of the present invention.

Referring initially to FIG. 1, therein is depicted an illustration of one embodiment of the security system 10 described herein being utilized at an entry point 12. Further, a remote location 14 is depicted wherein an individual 16 is utilizing the security system 10 to monitor the entry point 12 which includes a doorway 18 to a home having an environment 20. It should be appreciated that the security system 10 described herein may be utilized with any type of structure and entry point 12. In particular, the security system 10 presented herein is well suited for doorways at houses, apartments, lofts, condominiums, and townhouses, for example.

A video camera 22 and an external microphone 24 are disposed in the doorway 18. A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18. A cellular telephone 30 is disposed in the possession of the homeowner 16 who is away from the home in a park 32. It should be appreciated, however, that any homeowner location is within the teachings of the present invention. For example, the homeowner 16 may be in the backyard of the home or in a remote site such as an office. Moreover, the teachings presented herein apply to persons, such as family members, security personal, or friends, for example, other than the homeowner 16 that are monitoring or assisting with the monitoring of the home.

In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit that is in communication with the video camera 22, external microphone 24, proximity detector 26, and exterior speaker 28 as well as a cellular network for communicating with the cellular telephone 30.

Similarly, the control unit relays captured cellular audio communications from the homeowner 16 to the external speaker 28. In this manner, the homeowner is permitted to monitor the home in substantially realtime while away and, further, the homeowner 16 and individual 34 are able to communicate as if the homeowner 16 was at home. In particular, the individual 34 will believe that the homeowner 16 is home.

Accordingly, the security system 10 and accompanying method presented herein permit the homeowner 16 or designated entity or individual, who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed. The visitor (or perpetrator) can hear the homeowner's voice but cannot see the homeowner, since the video is communicated one-way from the doorway 18 to the cellular telephone 30 of the homeowner 16. In application, an honest visitor with good intentions will assume that the homeowner 16 is on premises. Similarly, a perpetrator will assume that the homeowner 16 is at home and the perpetrator can be expected to move on if his motives are unlawful.

Further, in another embodiment, the security system 10 includes a plurality of video cameras 22 positioned around

the perimeter of the property. The video cameras **22** may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner **16**; however, the plurality of video cameras **22** collect video for the homeowner's review irrespective of the occurrence of the triggering event.

FIG. **2** depicts one embodiment of the security system **10**. A control unit portion **40**, or control unit **40**, controls a communication portion **42** and relays data and communications between the communication portion **42** and the cellular telephone **30** via a cellular network **44**. As illustrated, the communication portion **42** includes the video camera **22**, the exterior microphone **24**, the exterior speaker **28** and a doorbell **29**, which may included as part of the communication portion **42** in particular embodiments. Preferably, the control unit **40** is located onsite with the components of the communication portion **42** and each of the components of the communication portion **42** may be connected to the control unit portion by a wired connection, such as a conventional circuit board or internal computer connection, a Category 5 (CAT 5) cable, or coaxial cable, for example, a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology, for example, or some combination thereof.

The cellular telephone network or cellular network **44** is employed to relay visual and audio data from the control unit to the cellular telephone **30** and relay audio data and control signals from the cellular telephone **30** to the control unit **40**. Several cellular telephone systems are available to provide the communication exchanges. By way of non-limiting examples, an exemplary list of cellular telephone systems is presented in Table 1.

TABLE 1

Exemplary Cellular Telephone Systems			
Cellular Telephone System	Generation	Channel Spacing	Access Method
CDMAONE	2 G	1.25 MHZ	CDMA
CDMA2000 1x	2.5 G	1.25 MHZ	CDMA
CDMA2000 1xEV-DO	3 G	1.25 MHZ	CDMA
CDMA2000 1xEV-DV	3 G	1.25 MHZ	CDMA
UMTS	3 G	5 MHZ	CDMA/TDMA
TD-SCDMA	3 G	1.6 MHZ	CDMA

Before continuing with the discussion of FIG. **2** in paragraph **24**, the cellular telephone systems of Table 1 will be briefly discussed. The CDMAONE cellular telephone system is the brand name for the standard reference IS95, which was the first CDMA system to gain widespread use. The initial specification for the system was IS95A, but its performance has since been upgraded under IS95B. Apart from voice, the CDMA cellular telephone system carries data at rates up to 14.4 kbps for IS95A and up to 115 kbps for IS95B.

The CDMA2000 1x cellular telephone system supports both voice and data capabilities within a standard 1.25 MHZ CDMA channel. This system doubles the voice capacity of CDMAONE systems and also supports high-speed data services. Rates of 153 kbps are currently available and greater data transfer rates are planned.

The CDMA2000 1xEV-DO or Evolution Data Only standard builds on the CDMA2000 standard and provides peak data rate capability of over 2.45 Mbps on a downlink, i.e., from the base station to the user. The CDMA2000 1xEV-DV or Evolution Data and Voice cellular telephone system can

simultaneously transmit voice and data with a peak data rate of 3.1 Mbps on the forward link or downlink and 384 kbps on the reverse link.

The UMTS (Universal Mobile Telecommunications System) utilizes Wideband CDMA with one 5 MHZ wide channel for both voice and data that provides speeds of up to 2 Mbps. The Time Division Synchronous CDMA or TD-SCDMA cellular telephone system, which is not popular in the United States, utilizes different time slots for base states and mobiles to communicate. It should be appreciated that the security system presented herein is not limited to any one particular cellular telephone system and systems not presented herein are within the teachings of the present invention. Additionally, the cellular telephone networks discussed herein may include systems which utilize the public switched telephone network (PSTN), satellite-based networks, and other systems known in the art.

Also, the cellular telephone networks described herein may include or employ the Internet, and associated protocols, which can be utilized by some models of cellular telephones to receive images as well as audio and visual data. In the instances when data is transferred to or from the cellular telephone via the Internet, the cellular network **44** may include onsite (or home) or offsite servers that are setup by a security company or the homeowner to facilitate the transfer of the data.

The cellular telephone **30** may comprise any long-range, portable electronic device that provides for peer-to-peer telecommunications over a long distance. The cellular telephone **30** may comprise a personal digital assistant (PDA) or other electronic communication device. As illustrated, the cellular telephone **30** receives signals **46** and sends signals **48**. The signals **46** from the control unit **40** to the cellular telephone **30** may include voice, images, and video signals. The signals **48** to the control unit **40** may comprise voice and control signals. In addition to the voice function of the cellular telephone **30**, the image, video, and data services of the cellular phone may be provided by a short message service (SMS) which utilizes text messaging, email, packet switching for access to the Internet to provide the content. Other suitable services for providing the content needed by the cellular telephone **30** include a multimedia message service (MMS) for sending and receiving photos and video. It should be appreciated, however, that the data and content received by the cellular telephone **30** is not limited to these services.

In an alternate embodiment, the video camera **22** may be integrated into the doorbell **29** and the integrated components disposed in communication with the control unit portion **40** such that the actuation of the doorbell establishes communication from the control unit portion **40** to the cellular telephone **30**. The initial communication from the control unit portion **40** to the cellular telephone **30** may be considered a notification and it may take the form of a page, email, text message, instant message, phone call or any other type messaging and it may be achieved through any type of network including the illustrated cellular network **44**. In response to the notification, the homeowner **16** may send a signal to the control unit portion **40** to either ignore the notification and event or accept more information including images or video about the notification and event. It should be appreciated that the instant security system provides flexibility and selectability in the manner in which the homeowner **16** receives notifications and alerts.

FIG. **3** depicts one embodiment of control and communication units **40** and **42** which form portions of the security system **10**. A microcontroller **60** controls the communication unit **42** and interfaces with the cellular network **44**. More

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specifically, the microcontroller 60 contains all the processing, memory, and interfaces needed for supporting the functionalities of the control unit 40 and communications unit 42. Numerous components are connected to the microcontroller 60; namely, the video camera 22, the exterior microphone 24, and the proximity detector 26 of the communication unit 42.

Further, the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74. Additionally, components, which are not illustrated as part of the communications unit 42, are connected to the microcontroller 60. A video monitor 76 is coupled to the microcontroller 60 as well as to the video camera 22 and the exterior microphone 24 through a multiplexer 78. It should be appreciated that these components described in FIG. 3 may be connected to the microcontroller 60 and interconnected by wired connections, wireless connections, or a combination thereof.

The switch 62, which is under the control of the microcontroller 60, administers access to the exterior speaker 28 and determines which input device drives a signal to the exterior speaker 28. In the illustrated implementation, the possible input devices include the OGM player/recorder 64, an interior microphone 80 having a push-to-talk circuit 82, and the cellular telephone 30 via the cellular network interface 70 and the antenna 72. The OGM player/recorder 64 is a device for presenting pre-recorded messages to visitors at the homeowner's local or remote instructions. For example, the homeowner may have a pre-recorded greeting giving specific instructions on where to leave a package. The homeowner may utilize the control panel 66, which may be positioned proximate to the interior microphone 80, to send a signal to the OGM player/recorder 64 to tell a visitor from an overnight delivery service where to leave a package. Alternatively, the homeowner may send a signal to the OGM player/recorder with the cellular telephone 30 as will be discussed in further detail hereinbelow.

In general, the control panel 66 permits the homeowner or other individual to manage the security system 10. In one implementation, the control panel 66 is onsite as well as accessible through the cellular telephone 30. The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system. By way of example, this feature permits the homeowner to utilize the cellular telephone 30 to notify a home security company or the police department in the instance of a break-in or other crime.

As previously discussed, the cellular network interface 70 and antenna 72 connect the security system 10 with the cellular network 44. The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74. Moreover, data stored in the data storage unit 74 may be transferred to a different medium or played on the video monitor 76. The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24. The internal microphone 80 with the push-to-talk circuit 82 allows an onsite homeowner or, as previously discussed, another individual, to talk to a visitor. The video monitor 76 and interior microphone 80, when used together, provide a traditional monitor with intercom system for the homeowner.

FIG. 4 depicts a flow chart of one embodiment of a method for providing security. At block 90, visual and audio commu-

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nications are captured at an entry point. At block 92, at least a portion of the captured visual and audio communications are relayed to a cellular telephone. At block 94, the at least a portion of the captured visual and audio communications are rendered at the cellular telephone. At block 96, audio communications are captured at the cellular phone. The audio communications are relayed from the cellular phone to the entry point at block 98. At block 100, the audio communications are rendered at the entry point, thereby providing for duplexed audio communications and one-way visual observation in order to achieve an improvement over the traditional video monitor and intercom system.

FIG. 5 depicts a flow chart of another embodiment of a method for providing security. At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114. At the control unit, in one implementation, the data is stored in the data storage.

At block 118, if the cellular telephone has teleconferencing functionality or the ability to simultaneously receive both data and voice, then the method advances to block 136 (see paragraph 41). On the other hand, if this functionality is not present in the cellular telephone or if the cellular telephone network being utilized does not support this type of functionality, then the method advances to block 120 wherein the control unit generates an image or video file that includes at least a portion of the visual or audio/visual data collected by the video camera and the exterior microphone. Whether an image file or video file is generated depends on the preferences programmed into the instant security system as well as the capabilities of the cellular network and the cellular telephone.

At block 122, the file is sent from the control unit to the cellular telephone via the cellular network. At block 124, an audio communication circuit between the control unit and the cellular telephone is completed. At block 126, the identity of the homeowner is authenticated. By way of example, in one implementation, the homeowner may be required to enter a passcode to authenticate the identity of the homeowner. If the homeowner does not enter the passcode, then the call is disconnected. As a further benefit, this type of call authentication or a similar system prevents the control unit from connecting the visitor with the homeowner's voicemail. Accordingly, the homeowner and security system do not provide an unintentional indication to the visitor that the homeowner is not home. Additionally, the homeowner may preprogram the control unit to play a pre-recorded message from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.

At block 128, the homeowner is presented with a menu of options that give the homeowner choices in how to handle the visitor's arrival to the home. The homeowner may select an option in a conventional manner such as by pressing a number on the cellular telephone corresponding to the number of the option. Alternatively, for example, a voice activated system may be utilized. By way of example and not by way of limitation, Table 2 presents a matrix that illustrates a portion of the options that the security system of the present invention can make available to the homeowner. Each of these options will be briefly described before returning to the description of FIG. 5 in paragraph 40.

TABLE 2

Options for Cellular Telephones without Teleconferencing Functionality	
Option Number	Option
1	No Action
2	Play a Pre-Recorded Greeting
3	Request Further Image or Video Data
4	Hear Audio Only
5	Duplexed Audio Communication
6	Notify Alarm Company
7	Conference Call

With respect to Option 1: No Action, the approaching individual that actuated the security system may be a family member returning home and entering the home through the front door. In this instance, the homeowner may wish to take no action. In this mode, the security system does not facilitate communication between the parties and the visitor is ignored by the security system.

With respect to Option 2: Play a Pre-Recorded Greeting, the approaching individual may be a delivery person that wishes to leave a package for the homeowner. The homeowner may select to play a pre-recorded greeting with detailed instructions describing where to leave the package for the delivery person with the OGM player/recorder. It should be appreciated that the security system may be equipped with more than one pre-recorded greeting. By way of further example, the homeowner may be in a remote part of the home or property and play a pre-recorded greeting for a friend that has approached the doorway which politely asks the visiting friend to wait at the door for a couple of minutes. A submenu or other conventional means may be employed to offer the homeowner a choice of pre-recorded messages to play for the visitor.

With respect to Option 3: Request Further Image or Video Data, the initial file received by the homeowner at the cellular telephone may be blurred or the visitor in the doorway may not be clearly identifiable from the image or video. With this option, the homeowner requests an additional image or video. When this option is selected, since the cellular telephone does not have teleconferencing functionality or the ability to simultaneously receive both voice and data, the control unit temporarily disconnects from the cellular telephone, sends the second image or video file, and then reestablishes audio communication with the cellular telephone. After the audio circuit is reestablished and optionally re-authenticated, the menu may be represented to the homeowner.

When Option 4: Hear Audio Only is selected by the homeowner, the homeowner chooses only to observe the visitor before taking further action, such as selecting a further option. Option 5: Duplexed Audio Communication permits the homeowner to have a verbal conversation with the visitor in the same manner as if the homeowner was present at the home and using the internal microphone. Option 6: Notify Alarm Company allows the homeowner to notify the alarm company or alternatively the police department of a potential or actual problem. This option is particularly important when the visitor is a perpetrator in the act of a crime such as breaking into the home. With respect to Option 7: Conference Call, the homeowner may conference call a third-party, such as a trusted neighbor that is home, into the conversation with the visitor. As alluded to, these options are exemplary of the robustness of the security system and these options may be original equipment manufacture (OEM) or programmed by the homeowner.

Returning now to the description of FIG. 5, as indicated by numeral 130, the homeowner selects Option 5: Duplexed

Audio Communication to have a two-way conversation with the visitor. At block 134, the homeowner views the visual file. This operation may occur at any time or simultaneously with the operations described in blocks 124 through 132. The operations of blocks 132 and 134 permit the homeowner who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.

Returning now to decision block 118, for cellular telephones that have teleconferencing functionality or an equivalent thereof, at block 136, a communication circuit is established between the control unit and cellular telephone. As previously alluded to, by way of example, some cellular telephones provide for the simultaneous or near simultaneous transfer of voice and data by utilizing the cellular network in conjunction with the Internet. At block 138, similar to block 126, the identity of the homeowner is authenticated. Continuing to block 140, a menu of options, such as the exemplary menu of Table 3, is available to the homeowner.

TABLE 3

Options for Cellular Telephones with Teleconferencing or Equivalent Functionality	
Option Number	Option
1	No Action
2	Play a Pre-Recorded Greeting
3	Observe Only
4	Duplexed Communication
5	Notify Alarm Company
6	Conference Call

These available options, where serve as non-limiting examples, are substantially equivalent to the options discussed at block 128. As indicated in FIG. 5, Option 4: Duplexed Communication is selected. Since the telephone has the ability to simultaneously receive data and voice communications, this option permits the cellular telephone to render a video file with substantially real time video visual and audio captured at the doorway of the home. Alternatively, streaming audio and video may be delivered. The homeowner is therefore allowed to see and hear the visitor while communicating with the visitor orally.

While this invention has been described with reference to illustrative embodiments, this description is not intended to be construed in a limiting sense. Various modifications and combinations of the illustrative embodiments as well as other embodiments of the invention, will be apparent to persons skilled in the art upon reference to the description. It is, therefore, intended that the appended claims encompass any such modifications or embodiments.

What is claimed is:

1. A doorbell monitoring system comprising:
 - a doorway having an environment;
 - a doorbell located in the doorway, the ringing of the doorbell being a triggering event;
 - a video camera and an external microphone disposed in the entry point, the video camera and external microphone, responsive to the triggering event, for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications;
 - an external speaker disposed in the entry point, the external speaker for rendering received cellular audio communications;
 - a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications

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received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and
 a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.

2. The system as recited in claim 1, wherein the video camera and the external microphone are integrated.

3. The system as recited in claim 1, wherein the external microphone and speaker are integrated.

4. The system as recited in claim 1, wherein the control unit is disposed in communication with the video camera and the external microphone by a communication link selected from the group consisting of wireless links and physical links.

5. The system as recited in claim 1, wherein the at least one portion of the entry point visual and audio communications comprises data selected from the group consisting of audio data, at least one image and audio data, and streaming visual and audio data.

6. The system as recited in claim 1, wherein the cellular telephone comprises teleconferencing functionality.

7. The system as recited in claim 1, wherein the connection between the control unit and cellular telephone comprises a network connection over a cellular network.

8. A method for providing doorbell monitoring, the method comprising:

ringing of a doorbell at an entry point;
 responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;
 relaying at least a portion of the captured visual and audio communications to a cellular phone;
 rendering the least a portion of the captured visual and audio communications at the cellular phone;
 capturing audio communications at the cellular phone;
 relaying the audio communications from the cellular phone to the entry point; and
 rendering the audio communications at the entry point.

9. The method as recited in claim 8, wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone occur substantially simultaneously.

10. The method as recited in claim 8, wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone generate duplexed audio communication.

11. The method as recited in claim 8, further comprising forwarding the captured visual and audio communications to a data storage device located onsite to the entry point.

12. The method as recited in claim 8, further comprising forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

13. The method as recited in claim 8, further comprising enabling the captured visual and audio communications with the cellular phone using a network selected from the group consisting of a Public Switched Telephone Network (PSTN), a satellite-based network, and the Internet.

14. A doorbell monitoring system comprising:
 a doorbell located at an entry point;
 means, responsive to the ringing of the doorbell, for capturing visual and audio communications at the entry point;

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means for relaying at least a portion of the captured visual and audio communications to a cellular phone;

means for rendering the least a portion of the captured visual and audio communications at the cellular phone;

means for capturing audio communications at the cellular phone;

means for relaying the audio communications from the cellular phone to the entry point; and

means for rendering the audio communications at the entry point.

15. The system as recited in claim 14, wherein the means for relaying at least a portion of the captured visual and audio communications and means for relaying the audio communications for the cellular phone operate substantially simultaneously.

16. The system as recited in claim 14, wherein the means for relaying at least a portion of the captured visual and audio communications and the means for relaying the audio communications for the cellular phone operate to provide duplexed audio communication.

17. The system as recited in claim 14, further comprising means for forwarding the captured visual and audio communications to means for data storage located onsite to the entry point.

18. The system as recited in claim 14, further comprising means for forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

19. A system for providing doorbell monitoring, the system comprising:

a doorway to a home having an environment;
 a doorway located in the doorway, the ringing of the doorbell being a triggering event;

a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway;

an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;

a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.

20. The system as recited in claim 19, wherein the home comprises a structure selected from the group consisting of a house, an apartment, a loft, a condominium, and a townhouse.

* * * * *



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PATENT AND TRADEMARK OFFICE

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ELECTRONIC PAYMENT RECEIPT

APPLICATION #
90/019,542

RECEIPT DATE / TIME
06/19/2024 05:21:38 PM Z ET

ATTORNEY DOCKET #
-

Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 66033826

AUTHORIZED BY -

CUSTOMER # 31814

FILING DATE -

CORRESPONDENCE ADDRESS -

FIRST NAMED INVENTOR Duke W. Zinser

Payment Information

PAYMENT METHOD
CARD / 4039

PAYMENT TRANSACTION ID
E20246IN22049317

PAYMENT AUTHORIZED BY
Kirby Drake

FEE CODE	DESCRIPTION	ITEM PRICE(\$)	QUANTITY	ITEM TOTAL(\$)
2831	EX PARTE REEXAMINATION (1.510(A)) STREAMLINED	2520.00	1	2520.00
TOTAL AMOUNT:				\$2,520.00

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National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C.

371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/559,808	09/01/2009	7583191	1048.1001	4697

31814 7590
SCOTT T. GRIGGS
17950 Preston Road
Suite 1000
DALLAS, TX 75252

08/12/2009

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 317 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Duke W. Zinser, Garland, TX;

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address.)

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3/18/14

7590

(5605/2009)

SCOTT T. GRIGGS
 901 MAIN STREET
 SUITE 6300
 DALLAS, TX 75202

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/559,808	11/14/2006	Duke W. Zinser	1048.1001	4697

TITLE OF INVENTION: SECURITY SYSTEM AND METHOD FOR USE OF SAME

APPL. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEES DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	08/05/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
PHAM, TOAN NGOC	2612	340-541000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Scott T. Griggs

2 Griggs Bergen LLP

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☒ Payment by credit card.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 50-3215 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature /Scott Griggs/

Date 07/23/2009

Typed or printed name Scott T. Griggs

Registration No. 48,331

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Electronic Patent Application Fee Transmittal

Application Number:	11559808			
Filing Date:	14-Nov-2006			
Title of Invention:	SECURITY SYSTEM AND METHOD FOR USE OF SAME			
First Named Inventor/Applicant Name:	Duke W. Zinser			
Filer:	Scott Taylor Griggs			
Attorney Docket Number:	1048.1001			
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl issue fee	2501	1	755	755
Publ. Fee- early, voluntary, or normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1055

Electronic Acknowledgement Receipt

EFS ID:	5759777
Application Number:	11559808
International Application Number:	
Confirmation Number:	4697
Title of Invention:	SECURITY SYSTEM AND METHOD FOR USE OF SAME
First Named Inventor/Applicant Name:	Duke W. Zinser
Customer Number:	31814
Filer:	Scott Taylor Griggs
Filer Authorized By:	
Attorney Docket Number:	1048.1001
Receipt Date:	23-JUL-2009
Filing Date:	14-NOV-2006
Time Stamp:	17:03:03
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 1055
RAM confirmation Number	3353
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1	Issue Fee Payment (PTO-85B)	Fee_Transmittal.pdf	1825089 5b16ac9b75169ddfbcb849ac3ac032887345b09b3	no	1
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2	Fee Worksheet (PTO-875)	fee-info.pdf	31910 0e1e4a55d9c6f45883ca9db2492446ca7da332b7	no	2
Warnings:					
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11/559,808

11559808 - GAU: 2612

PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0651-0031

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet TWO

of TWO

Complete if Known

Application Number	Pending
Filing Date	November 14, 2006
First Named Inventor	Zinser, Duke W.
Art Unit	Pending Assignment
Examiner Name	Pending Assignment
Attorney Docket Number	1048.1001

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
↓	11P/	US- 6,073,192	02-05-1998	Clapp et al.	06/2000
		US- 6,094,213	07-25-2000	Mun et al.	
		US- 6,226,031	05-01-2001	Barracough et al.	
		US- 6,590,604	07-08-2003	Tucker et al.	
		US- 6,661,340	12-09-2003	Saylor et al.	
		US- 6,727,811	04-27-2004	Fendis	
		US- 6,753,899	06-22-2004	Lapalme et al.	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

Examiner Signature	/Toan Pham/	Date Considered	11/24/2008
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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NOTICE OF ALLOWANCE AND FEE(S) DUE

31814 7590 05/05/2009
SCOTT T. GRIGGS
901 MAIN STREET
SUITE 6300
DALLAS, TX 75202

EXAMINER	
PHAM, TOAN NGOC	
ART UNIT	PAPER NUMBER
2612	
DATE MAILED: 05/05/2009	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/559,808	11/14/2006	Duke W. Zinser	1048.1001	4697
TITLE OF INVENTION: SECURITY SYSTEM AND METHOD FOR USE OF SAME				

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	08/05/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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31814 7590 05/05/2009

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	(Depositor's name)
	(Signature)
	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/559,808	11/14/2006	Duke W. Zinser	1048.1001	4697

TITLE OF INVENTION: SECURITY SYSTEM AND METHOD FOR USE OF SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	08/05/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
PHAM, TOAN NGOC	2612	340-541000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

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- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

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2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/559,808	11/14/2006	Duke W. Zinser	1048.1001	4697
31814	7590	05/05/2009	EXAMINER	
SCOTT T. GRIGGS 901 MAIN STREET SUITE 6300 DALLAS, TX 75202			PHAM, TOAN NGOC	
			ART UNIT	PAPER NUMBER
			2612	
DATE MAILED: 05/05/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 317 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 317 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	11/559,808	ZINSER, DUKE W.	
	Examiner	Art Unit	
	Toan N. Pham	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 2/25/09.
2. ☒ The allowed claim(s) is/are 1 and 3-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. ☐ Notice of References Cited (PTO-892) | 5. ☐ Notice of Informal Patent Application |
| 2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. ☐ Examiner's Amendment/Comment |
| 4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. ☐ Examiner's Statement of Reasons for Allowance |
| | 9. ☐ Other ____. |

/Toan N Pham/
Primary Examiner, Art Unit 2612

Search Notes 	Application/Control No. 11559808	Applicant(s)/Patent Under Reexamination ZINSER, DUKE W.
	Examiner Toan N Pham	Art Unit 2612

SEARCHED			
Class	Subclass	Date	Examiner
340	541, 506, 539.1	11/20/08	TNP
348	152, 140.1	11/20/08	TNP
455	556.1	11/20/08	TNP

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	11/20/08, 11/24/08	TNP
UPDATE SEARCH	4/23/09	TNP

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
340	541, 539.1	4/23/09	TNP

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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	security with system with doorway with (activate trigger) with video with audio	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2009/04/24 15:26
L2	271	security and system and doorway and (activate trigger) and video and audio	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2009/04/24 15:27
L3	10	2 and cellular and speaker and doorbell and entry	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2009/04/24 15:27
L4	0	340/540. ccls. and cellular and speaker and doorbell and entry	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2009/04/24 15:27
L5	3	340/541. ccls. and cellular and speaker and doorbell and entry	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2009/04/24 15:28
S26	11	doorbell with activated with security	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2009/04/13 09:36

4/ 24/ 09 3:28:38 PM**C:\ Documents and Settings\ tpham2\ My Documents\ EAST\ workspaces\ security system cellular communication.wsp**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application: Duke W. Zinser
Serial No.: 11/559,808
Confirmation No.: 4697
Filed: November 14, 2006
Art Unit: 2612
Examiner: Toan Ngoc Pham
For: Security System and Method for Use of Same
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Response Under 37 C.F.R. §1.111

Dear Sir:

This is a response to the Office Action dated November 26, 2008. Reconsideration and withdrawal of the outstanding rejection and allowance of the claims pending in this application are respectfully requested in view of the following:

- Changes to the claims as presented in the Listing of the Claims, which begin on page 2 of this Response.
- Remarks, which begin on page 11.

LISTING OF CLAIMS PER 37 C.F.R. §1.121

1. (Currently amended) A ~~security~~ doorbell monitoring system comprising:

~~an entry point~~ a doorway having an environment;

a doorbell located in the doorway, the ringing of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point, the video camera and external microphone, responsive to the triggering event, for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received cellular audio communications;

a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

a cellular telephone disposed remotely to the ~~entry point~~ doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit,

and rendering the at least one portion of entry point communications received from the control unit.

2. (Cancelled)

3. (Original) The system as recited in claim 1, wherein the video camera and the external microphone are integrated.

4. (Original) The system as recited in claim 1, wherein the external microphone and speaker are integrated.

5. (Original) The system as recited in claim 1, wherein the control unit is disposed in communication with the video camera and the external microphone by a communication link selected from the group consisting of wireless links and physical links.

6. (Original) The system as recited in claim 1, wherein the at least one portion of the entry point visual and audio communications comprises data selected from the group consisting of audio data, at least one image and audio data, and streaming visual and audio data.

7. (Original) The system as recited in claim 1, wherein the cellular telephone comprises teleconferencing functionality.

8. (Original) The system as recited in claim 1, wherein the connection between the control unit and cellular telephone comprises a network connection over a cellular network.

9. (Currently amended) A method for providing ~~security~~
doorbell monitoring, the method comprising:

ringing of a doorbell at an entry point;

responsive to the ringing of the doorbell, capturing visual
and audio communications at ~~an~~ the entry point;

relaying at least a portion of the captured visual and audio
communications to a cellular phone;

rendering the least a portion of the captured visual and audio
communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to
the entry point; and

rendering the audio communications at the entry point.

10. (Original) The method as recited in claim 9, wherein
the operation of relaying at least a portion of the captured visual
and audio communications and the operation of relaying the audio
communications for the cellular phone occur substantially
simultaneously.

11. (Original) The method as recited in claim 9, wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone generate duplexed audio communication.

12. (Original) The method as recited in claim 9, further comprising forwarding the captured visual and audio communications to a data storage device located onsite to the entry point.

13. (Original) The method as recited in claim 9, further comprising forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

14. (Currently amended) A ~~security~~ doorbell monitoring system comprising:

a doorbell located at an entry point;

means, responsive to the ringing of the doorbell, for capturing visual and audio communications at ~~an~~ the entry point;

means for relaying at least a portion of the captured visual and audio communications to a cellular phone;

means for rendering the least a portion of the captured visual and audio communications at the cellular phone;

means for capturing audio communications at the cellular phone;

means for relaying the audio communications from the cellular phone to the entry point; and

means for rendering the audio communications at the entry point.

15. (Original) The system as recited in claim 14, wherein the means for relaying at least a portion of the captured visual and audio communications and means for relaying the audio communications for the cellular phone operate substantially simultaneously.

16. (Original) The system as recited in claim 14, wherein the means for relaying at least a portion of the captured visual and audio communications and the means for relaying the audio communications for the cellular phone operate to provide duplexed audio communication.

17. (Original) The system as recited in claim 14, further comprising means for forwarding the captured visual and audio communications to means for data storage located onsite to the entry point.

18. (Original) The system as recited in claim 14, further comprising means for forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

19. (Currently amended) A system for providing ~~security~~
doorbell monitoring, the system comprising:

a doorway to a home having an environment;

a doorway located in the doorway, the ringing of the doorbell
being a triggering event;

a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway;

an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;

a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at

the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.

20. (Original) The system as recited in claim 19, wherein the home comprises a structure selected from the group consisting of a house, an apartment, a loft, a condominium, and a townhouse.

21. (New) The method as recited in claim 9, further comprising enabling the captured visual and audio communications with the cellular phone using a network selected from the group consisting of a Public Switched Telephone Network (PSTN), a satellite-based network, and the Internet.

APPLICANT'S REMARKS

This Response is timely filed. Claims 1-20, including independent claims 1, 9, 14, and 19, were originally presented for examination. Independent claims 1, 9, 14, and 19 have been amended. Claim 2 has been cancelled. Claim 21, which depends from claim 9, and defines the cellular telephone networks discussed herein as including the Public Switched Telephone Network (PSTN), satellite-based networks, and Internet as described in paragraphs 23-24 of the specification has been added.

Claims 1 and 3-21, including claims 1, 9, 14, and 19, are currently pending. No new matter has been added by way of this Response. Favorable reconsideration of the present Response as currently constituted is respectfully requested.

EXAMINER REMARKS

The Examiner made the following remarks in the outstanding Office Action:

- Claims 1-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,778,084 issued in the names of Chang et al. (hereinafter "Chang").

REJECTION UNDER 35 U.S.C. §102(e)

Claims 1-20 are rejected under §102(e) as being anticipated by Chang. As claim 2 is cancelled, with respect to claims 1 and 3-20, Applicant respectfully traverses this rejection. Based upon the following, withdrawal of the §102(e) rejection and allowance of 1 and 3-20 is respectfully solicited.

Anticipation is established by documentary evidence, and requires that every claim element and limitation is set forth in a single prior art reference, in the same form and order as in the claim. An anticipating reference must enable that which it is asserted to anticipate. Chang does not qualify as an anticipating reference as demonstrated by the following discussion in the sections entitled "Disclosure of Chang" and "Anticipation Analysis."

Disclosure of Chang

Chang discloses an interactive wireless surveillance and security system 100 that provides a property owner notice regarding the nature of an alarm event. Chang emphasizes security and the occurrence of alarm events based upon detection by an intrusion device of an intruder, as follows:

Thus, embodiments of the present invention provide a surveillance and **security** system for a premises or property capable of providing an expedited **alarm notification** to the property owner, regardless of the proximity of the owner with respect to the property, while providing sufficient detail to the property owner

regarding the nature of the **alarm and the related events** transpiring at the property. Further, embodiments of the present invention allow the property to be surveyed with sufficient detail to allow the **nature of the alarm** to be immediately identified and addressed by the property owner. In addition, embodiments of the present invention are capable of allowing the property owner to assess the **security status** of the property prior to approaching that property, for example, as a periodic status update of the property provided to the property owner or by allowing the property owner to conduct an on-demand assessment of the property. Accordingly, embodiments of the present invention most advantageously allow the owner of a property or premises to implement surveillance and **security** for the property while having a handheld command unit for facilitating instant notification of **alarm events**, as well as two-way audio and/or video communication between the owner and the premises. Emphasis added. Column 6, lines 43-65.

This alarm system of Chang works with one or more intrusion devices 220 "capable of detecting any intrusion onto the premises 120." Column 3, lines 56-67. Chang continues by stating that the intrusion devices may comprise one of the following: "glass breakage sensors or other shock sensors, motion detectors, contact switches, proximity or alignment sensors." Column 4, lines 1-4.

Each of these "triggering" alarm devices is a security device for detecting and intruder. A glass breakage sensor is tuned to the vibrations caused by breaking glass and provides an associated alarm when an intruder breaks the glass. A shock sensor detects contact with a window having an amount of force exceeding a pre-determined threshold and provides an alarm when the force threshold is exceeded by an intruder attempting entry. A motion detector quantifies motion and provides notification of the presence of a

moving object, such as intruder, within the field of view. A contact switch, which is commonly used with doors and windows, detects the separation of two adjacent plates and provides an alarm upon an intruder opening a door or window. A proximity sensor, similar to a motion detect, is a sensor able to detect the presence of nearby objects, such as an intruder making entry, without any physical contact and furnish notification of the same. An alignment sensor senses the angle between two references and provides a notification of the displacement of this angle by, for example, an intruder attempting to gain access. Accordingly, Chang discloses an interactive wireless surveillance and security system that notifies an individual of alarm events based on detection by an intrusion device. Chang is directed to notification of intruders. As Chang is directed to detecting and responding to alarm events associated with intruders, Chang does **not** disclose a doorbell or a doorbell as a trigger as doorbells are for visitors, not intruders.

Anticipation Analysis

As amended, Applicant's independent claims recite a doorbell monitoring system or method that notifies an individual of a doorbell ringing triggered by the ringing of the doorbell. Applicant's claims monitor a doorbell for detecting the presence of visitors. As discussed, the cellular telephone audio and visual

communicating to and from the cellular phone may include systems which utilize the Public Switched Telephone Network (PSTN), satellite telephone network (PSTN), satellite-based networks, the Internet, and other systems known in the art.

Contrary to Applicant's claims, in each application disclosed by Chang, the presence of an intruder is detected by actuation of an intrusion device rather than the ringing of a doorbell. The result is Chang is different with respect to the claimed invention. Chang does not work in connection with an everyday, non-emergency event, triggered by a visitor ringing the doorbell. Chang only works with emergency, alarm events.

Applicant respectfully submits that Chang cannot anticipate because it does not show the elements of the claims of issue. By way of example, with respect to each of the independent claims and the associated dependent claims, Chang does not mention a doorbell monitoring system or method having the ringing of the doorbell being a triggering event for communication between a video camera, external microphone and remotely disposed cellular telephone, and it does not enable these limitations, either expressly or inherently.

FEE STATEMENT

Applicant notes that dependent claim 2 was cancelled and new dependent claim 21 added. Therefore, the number of claims remains the same. Applicant believes no fees are due for the filing of this Response. If any additional fees are due, however, please charge our deposit account (Account No. 50-3215).

CONCLUSION

In view of the forgoing, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections to claims and allow claims 1 and 3-21 presented for consideration herein. Accordingly, a favorable action in the form of an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned for any reason that would advance the instant application to issue.

Dated this 25th day of February, 2009.

Respectfully submitted:

/Scott Griggs/

Scott T. Griggs
Reg. No. 48,331

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Dallas, Texas 75202
Tel 214.653.2400
Fax 214.653.2401

Electronic Acknowledgement Receipt

EFS ID:	4853540
Application Number:	11559808
International Application Number:	
Confirmation Number:	4697
Title of Invention:	Security System and Method for Use of Same
First Named Inventor/Applicant Name:	Duke W. Zinser
Customer Number:	31814
Filer:	Scott Taylor Griggs
Filer Authorized By:	
Attorney Docket Number:	1048.1001
Receipt Date:	25-FEB-2009
Filing Date:	14-NOV-2006
Time Stamp:	11:35:58
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ROA_PTO.pdf	95143 412466b961d3c529e7dcec7ea6e9bda94fc64429	yes	16

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	10
	Applicant Arguments/Remarks Made in an Amendment	11	16
Warnings:			
Information:			
Total Files Size (in bytes):		95143	
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>			



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/559,808	11/14/2006	Duke W. Zinser	1048.1001	4697
31814	7590	11/26/2008		
SCOTT T. GRIGGS 901 MAIN STREET SUITE 6300 DALLAS, TX 75202			EXAMINER PHAM, TOAN NGOC	
			ART UNIT 2612	PAPER NUMBER
			MAIL DATE 11/26/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 11/559,808	Applicant(s) ZINSER, DUKE W.	
	Examiner Toan N. Pham	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/14/06</u> . | 6) ☐ Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. (US 6,778,084) (Chang).

Regarding claim 1: Chang discloses a security system comprising an entry point having an environment (125, 130, Fig. 1); a video camera (180) and an external microphone disposed in the entry point, the video camera and external microphone for capturing entry point visual and audio communications at the entry point (col. 3, lines 61-63) and transmitting the captured entry point visual and audio communications; an external speaker (200) disposed in the entry point, the external speaker for rendering received cellular audio communications; a control unit (240) disposed in communication

with the video camera, the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and a cellular telephone (160) (col. 4, lines 32-41, 64-66) disposed remotely to the entry point and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.

Regarding claim 2: Chang discloses the entry point comprises a doorway (Fig. 1).

Regarding claim 3: Chang discloses the video camera (180) for capturing both video and audio data (col. 3, lines 61-67); thus, the camera and the external microphone are integrated.

Regarding claim 4: Chang discloses the external microphone and speaker (200) are integrated with the master unit (col. 4, lines 9-23).

Regarding claim 5: Chang discloses the control unit is disposed in communication with the video camera and the external microphone by a communication link selected from the group consisting of wireless links and physical links (col. 4, lines 9-23).

Regarding claim 6: Chang discloses the data captured consisting of audio data, image and audio data and streaming visual and audio data (col. 3, lines 61-67; col. 4, lines 56-60; col. 5, lines 18-54).

Regarding claim 7: Chang discloses the cellular telephone comprises two-way communication (col. 4, lines 42-67; col. 5, lines 41-54); Thus, teleconferencing is inherent.

Regarding claim 8: Chang discloses the connection between the cellular telephone and the control unit is via cellular network (col. 4, lines 24-41).

Regarding claim 9: Chang discloses a security system comprising capturing visual and audio communications at an entry point; relaying at least a portion of the captured visual and audio communications to a cellular phone (160); rendering the least a portion of the captured visual and audio communications at the cellular phone; capturing audio communications at the cellular phone; relaying the audio communications from the cellular phone to the entry point; and rendering the audio communications at the entry point (col. 3, lines 56-67; col. 4, lines 23-66; col. 5, lines 17-54; Fig. 1).

Regarding claim 10: Chang discloses the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone occur substantially simultaneously (col. 5, lines 18-40).

Regarding claim 11: Chang discloses the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone generate duplexed audio communication (col. 4, lines 24-66; col. 5, lines 23-40).

Regarding claim 12: Chang discloses forwarding the captured visual and audio communications to a data storage device located onsite to the entry point (col. 5, lines 18-40).

Regarding claim 13: Chang discloses forwarding the captured visual and audio communications to a video monitor located onsite to the entry point (col. 5, lines 41-54).

Regarding claim 14: Chang discloses a security system comprising means for capturing visual and audio communications at an entry point; means for relaying at least a portion of the captured visual and audio communications to a cellular phone (160); means for rendering the least a portion of the captured visual and audio communications at the cellular phone; means for capturing audio communications at the cellular phone; means for relaying the audio communications from the cellular phone to the entry point; and means for rendering the audio communications at the entry point (col. 3, lines 56-67; col. 4, lines 24-67; col. 5, lines 18-40).

Regarding claim 15: Chang discloses the means for relaying at least a portion of the captured visual and audio communications and means for relaying the audio communications for the cellular phone operate substantially simultaneously (col. 5, lines 18-40).

Regarding claim 16: Chang discloses the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone generate duplexed audio communication (col. 4, lines 24-66; col. 5, lines 23-40).

Regarding claim 17: Chang discloses forwarding the captured visual and audio communications to a data storage device located onsite to the entry point (col. 5, lines 18-40).

Regarding claim 18: Chang discloses forwarding the captured visual and audio communications to a video monitor located onsite to the entry point (col. 5, lines 41-54).

Regarding claim 19: Chang discloses a security system comprising a doorway to a home (125) having an environment (130); a video camera (180) for capturing both video and audio data (col. 3, lines 61-67); thus, the camera and the external microphone are integrated, when actuated, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications; a proximity detector (col. 4, line 2) disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway; an external speaker (200) disposed in the doorway, the external speaker for rendering received cellular audio communications; a control unit (240) disposed in communication with the video camera, the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the

external speaker; and a cellular telephone (160) disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home (col. 3, lines 56-67; col. 4, lines 24-67; col. 5, lines 18-46).

Regarding claim 20: Chang discloses the home comprises a residential dwelling (col. 3, lines 59-61); thus, inherent of the group consisting of a house, an apartment, a loft, a condominium, and a townhouse.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of Carter (US 7,193,644), Naidoo et al. (US 6,658,091) and Hentz et al. (US 7,030,753) are cited to show a variety of security systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan N. Pham whose telephone number is (571) 272-2967. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin C. Lee can be reached on (571) 272-2963. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Toan N Pham/
Primary Examiner, Art Unit 2612

Application/Control Number: 11/559,808
Art Unit: 2612

Page 9

Notice of References Cited	Application/Control No. 11/559,808		Applicant(s)/Patent Under Reexamination ZINSER, DUKE W.	
	Examiner Toan N. Pham		Art Unit 2612	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,778,084	08-2004	Chang et al.	340/541
*	B	US-7,193,644	03-2007	Carter, Ronald	348/14.06
*	C	US-6,658,091	12-2003	Naidoo et al.	379/37
*	D	US-7,030,753	04-2006	Hentz et al.	340/531
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Index of Claims</i> 	Application/Control No. 11559808	Applicant(s)/Patent Under Reexamination ZINSER, DUKE W.
	Examiner Toan N Pham	Art Unit 2612

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	11/24/2008								
	1	✓								
	2	✓								
	3	✓								
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	15	✓								
	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	✓								

Search Notes 	Application/Control No. 11559808	Applicant(s)/Patent Under Reexamination ZINSER, DUKE W.
	Examiner Toan N Pham	Art Unit 2612

SEARCHED			
Class	Subclass	Date	Examiner
340	541, 506, 539.1	11/20/08	TNP
348	152, 140.1	11/20/08	TNP
455	556.1	11/20/08	TNP

SEARCH NOTES			
Search Notes		Date	Examiner
EAST		11/20/08, 11/24/08	TNP

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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<div>Application Number</div> <div></div>	Application/Control No.	Applicant(s)/Patent under Reexamination	
	11/559,808	ZINSER, DUKE W.	
	Examiner	Art Unit	
	Toan N. Pham	2612	

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	224	security with system with audio with video with communication	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/24 14:24
L2	84	1 and display and monitor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/24 14:24
L3	44	2 and speaker and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/24 14:25
L4	19	("4524384").URPN.	USPAT	OR	OFF	2008/11/24 15:21
L5	9	348/152.ccls. and entry and way and monitoring and cellular and communication and camera and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/24 16:20
L6	12	348/14.01.ccls. and entry and way and monitoring and cellular and communication and camera and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/24 16:20
S1	53	("5,861,804" "5,907,352" "6,023,223" "6,060,994" "6,097,429" "6,271,752" "6,429,893" "6,466,261" "6,476,858" "6,542,078" "6,714,237" "6,873,261" "6,965,313" "7,020,474" "7,030,752" "7,015,943" "7,034,681" "20060022816" "6,049,353" "6,073,192" "6,094,213" "6,226,031" "6,590,604"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 17:01

		"6,661,340" "6,727,811" "6,753,899").pn.				
S2	17	("6661340").URPN.	USPAT	OR	OFF	2008/11/20 17:03
S3	30	security with system with camera with microphone with speaker	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 17:12
S4	14	S3 and ((cellular mobile) adj2 phone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 17:12
S5	853	security with system with premises	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 17:20
S6	28	S5 and relay and (cellular mobile) adj2 phone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 17:21
S7	79	home with security with cellular with communication	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:16
S8	62	S7 and control	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:17
S9	5	S8 and speaker and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:17
S10	0	remote with doorbell with communication with cellular	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:26
S11	2	(door adj2 bell) with cellular with communication	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:27
S12	2525	entry and way and monitoring and cellular and communication and camera and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:28
S13	23	S12 and security and (door same bell)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:29
S14	21	455/556.1.ccls. and entry and way and monitoring and cellular and communication and camera and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:34

S15	24	340/541.ccls. and entry and way and monitoring and cellular and communication and camera and microphone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/11/20 19:37
S16	3	("6778084").URPN.	USPAT	OR	OFF	2008/11/20 19:42
S17	1	("7030753").URPN.	USPAT	OR	OFF	2008/11/20 19:43
S18	21	("20020077889" "20020108125" "20020164962" "20030234725" "5260778" "6559769" "6615186" "6618074" "6731198" "6738087" "6742116" "6745231" "6754481" "6756899" "6762788" "6778084" "6778085" "6807168" "6812851" "6850209" "6951030").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/11/20 19:44
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	"6020825"				
	"6091327"				
	"6166632"				
	"6211907"				
	"6559769").PN.				

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cellular communication.w sp

Attorney Docket No.: 1048.1001
Customer No.: 31,814

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application: Zinser, Duke W.

Serial No.: Pending

Confirmation No.: Pending

Filed: November 14, 2006

Art Unit: Pending

Examiner: Pending

For: Security System and Method for Use of Same

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Information Disclosure Statement

Dear Sir:

As listed on the accompanying form PTO/SB/08, submitted herewith are the indicated references which Applicant believes may be material to the examination of the above-identified application, and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. §1.56.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made, an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists. Further, the filing of this information disclosure statement shall not be construed as an admission against interest

in any manner. Written notification that the enclosed references have been considered in their entirety by return of a copy of the enclosed form, completed by the Examiner, is respectfully requested.

This Information Disclosure Statement is being filed within three months of the filing date of the national application other than a continued prosecution application under §1.53(d) or within three months of the date of entry of the national stage as set forth in §1.491 in an international application. (37 C.F.R. §1.97(b)).

Dated this 14th day of November, 2006.

Respectfully submitted:

/Scott Griggs/

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Reg. No. 48,331

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet **ONE** of **TWO****Complete if Known**

Application Number	Pending 11/559,808
Filing Date	November 14, 2006
First Named Inventor	Zinser, Duke W.
Art Unit	Pending Assignment 2612
Examiner Name	Pending Assignment Toan Pham
Attorney Docket Number	1048.1001

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
/TP/		US- 5,861,804	01-19-1999	Fansa et al.	
		US- 5,907,352	05-25-1999	Gilley	
		US- 6,023,223	02-08-2000	Baxter, Jr.	
		US- 6,060,994	05-09-2000	Chen	
		US- 6,097,429	08-01-2000	Seeley et al.	
		US- 6,271,752	08-07-2001	Vaios	
		US- 6,429,893	08-06-2002	Xin	
		US- 6,466,261	10-15-2002	Nakamura	
		US- 6,476,858	11-05-2002	Ramirez Diaz et al.	
		US- 6,542,078	04-01-2003	Script et al.	
		US- 6,714,237	03-30-2004	Lee et al.	
		US- 6,873,261	03-29-2005	Anthony et al.	
		US- 6,965,313	11-15-2005	Saylor et al.	
		US- 7,020,474	03-28-2006	Scott	
		US- 7,030,752	04-18-2006	Tyroler	
		US- 7,015,943	03-21-2006	Chiang	
		US- 7,034,681	04-25-2006	Yamamoto	
		US- 2006/0022816	02-02-2006	Yukawa	
		US- 6,049,353	04-11-2000	Gray	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				

Examiner Signature	/Toan Pham/	Date Considered	11/24/2008
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **TWO** of **TWO****Complete if Known**

Application Number	Pending
Filing Date	November 14, 2006
First Named Inventor	Zinser, Duke W.
Art Unit	Pending Assignment
Examiner Name	Pending Assignment
Attorney Docket Number	1048.1001

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
/TP/		US- 6,073,192	02-05-1998	Clapp et al.	
↓		US- 6,094,213	07-25-2000	Mun et al.	
		US- 6,226,031	05-01-2001	Barracough et al.	
		US- 6,590,604	07-08-2003	Tucker et al.	
		US- 6,661,340	12-09-2003	Saylor et al.	
		US- 6,727,811	04-27-2004	Fendis	
		US- 6,753,899	06-22-2004	Lapalme et al.	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				

Examiner Signature	/Toan Pham/	Date Considered	11/24/2008
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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BIB DATA SHEET

CONFIRMATION NO. 4697

SERIAL NUMBER 11/559,808	FILING or 371(c) DATE 11/14/2006 RULE	CLASS 340	GROUP ART UNIT 2612	ATTORNEY DOCKET NO. 1048.1001	
APPLICANTS Duke W. Zinser, Garland, TX; ** CONTINUING DATA ***** TNP ** FOREIGN APPLICATIONS ***** TNP ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **					
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and Acknowledged <u>/TOAN NGOC PHAM/</u> Examiner's Signature	☐ Met after Allowance Initials _____	STATE OR COUNTRY TX	SHEETS DRAWINGS 3	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 4
ADDRESS SCOTT T. GRIGGS 901 MAIN STREET SUITE 6300 DALLAS, TX 75202 UNITED STATES					
TITLE Security System and Method for Use of Same					
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Title: Security System and Method for Use of Same

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SCOTT T. GRIGGS
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Security System and Method for Use of Same

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340

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SECURITY SYSTEM AND METHOD FOR USE OF SAME

TECHNICAL FIELD OF THE INVENTION

[0001] This invention relates, in general, to security systems and, in particular, to a security system and accompanying method for use of the same for providing remote surveillance and communication with a doorway or other point of entry.

BACKGROUND OF THE INVENTION

[0002] Security systems are typically used to monitor alarms and connect an onsite control unit to a predetermined third party. For example, security systems may utilize a direct phone wire (or tamper-resistant fiber optic cable) to connect the control unit to a third party security monitoring service or, in some high end systems, to a first responder via. Onsite speaker phones allow for the third party to speak with the intruder. In the instance of an actual break-in, the speaker phone may be used to sound an alarm or to allow a person to urge the intruder to cease and desist as response

units have been dispatched. These existing security systems are reactive, however, and a need exists for a security system that provides a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

SUMMARY OF THE INVENTION

[0003] A security system and method for use of the same are disclosed that provide for remote surveillance of an entry way of a property in order to deter potential burglars and other unwanted individuals. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone, respectively, to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point. The systems and methods presented herein thereby provide a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] For a more complete understanding of the features and advantages of the present invention, reference is now made to the detailed description of the invention along with the accompanying figures in which corresponding numerals in the different figures refer to corresponding parts and in which:

[0005] Figure 1 is a perspective illustration of an entry point equipped with one embodiment of the security system described herein and a remote location wherein an individual is utilizing the security system to monitor the entry point;

[0006] Figure 2 is a functional block diagram of one embodiment of the security system;

[0007] Figure 3 is a functional block diagram of one embodiment of communication and control units which form portions of the security system;

[0008] Figure 4 is a flow chart depicting one embodiment of a method for providing security; and

[0009] Figure 5 is a flow chart depicting another embodiment of a method for providing security.

DETAILED DESCRIPTION OF THE INVENTION

[0010] While the making and using of various embodiments of the present invention are discussed in detail below, it should be appreciated that the present invention provides many applicable inventive concepts which can be embodied in a wide variety of specific contexts. The specific embodiments discussed herein are merely illustrative of specific ways to make and use the invention, and do not delimit the scope of the present invention.

[0011] Referring initially to figure 1, therein is depicted an illustration of one embodiment of the security system 10 described herein being utilized at an entry point 12. Further, a remote location 14 is depicted wherein an individual 16 is utilizing the security system 10 to monitor the entry point 12 which includes a doorway 18 to a home having an environment 20. It should be appreciated that the security system 10 described herein may be utilized with any type of structure and entry point 12. In particular, the security system 10 presented herein is well suited for doorways at houses, apartments, lofts, condominiums, and townhouses, for example.

[0012] A video camera 22 and an external microphone 24 are disposed in the doorway 18. A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18. A cellular telephone 30 is disposed in the possession of the homeowner 16 who is away from the home in a park 32. It should be appreciated, however, that any homeowner location is within the teachings of the present invention. For example, the homeowner 16 may be in the backyard of the home or in a remote site such as an office. Moreover, the teachings presented herein apply to persons, such as family members, security personal, or friends, for example, other than the homeowner 16 that are monitoring or assisting with the monitoring of the home.

[0013] In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit that is in communication with the video camera 22, external microphone 24, proximity detector 26, and exterior speaker 28 as well as

a cellular network for communicating with the cellular telephone 30.

[0014] Similarly, the control unit relays captured cellular audio communications from the homeowner 16 to the external speaker 28. In this manner, the homeowner is permitted to monitor the home in substantially realtime while away and, further, the homeowner 16 and individual 34 are able to communicate as if the homeowner 14 was at home. In particular, the individual 34 will be believe that the homeowner 16 is home.

[0015] Accordingly, the security system 10 and accompanying method presented herein permit the homeowner 16 or designated entity or individual, who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed. The visitor (or perpetrator) can hear the homeowner's voice but cannot see the homeowner, since the video is communicated one-way from the doorway 18 to the cellular telephone 30 of the homeowner 16. In application, an honest visitor with good intentions will assume that the homeowner 16 is on premises. Similarly, a perpetrator will

assume that the homeowner 16 is at home and the perpetrator can be expected to move on if his motives are unlawful.

[0016] Further, in another embodiment, the security system 10 includes a plurality of video cameras 22 positioned around the perimeter of the property. The video cameras 22 may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.

[0017] Figure 2 depicts one embodiment of the security system 10. A control unit portion 40, or control unit 40, controls a communication portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44. As illustrated, the communication portion 42 includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29, which may included as part of the communication portion 42 in particular embodiments. Preferably, the control unit 40 is located onsite with the

components of the communication portion 42 and each of the components of the communication portion 42 may be connected to the control unit portion by a wired connection, such as a conventional circuit board or internal computer connection, a Category 5 (CAT 5) cable, or coaxial cable, for example, a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology, for example, or some combination thereof.

[0018] The cellular telephone network or cellular network 44 is employed to relay visual and audio data from the control unit to the cellular telephone 30 and relay audio data and control signals from the cellular telephone 30 to the control unit 40. Several cellular telephone systems are available to provide the communication exchanges. By way of non-limiting examples, an exemplary list of cellular telephone systems is presented in Table 1.

[0019] Table 1. Exemplary Cellular Telephone Systems

Cellular Telephone System	Generation	Channel Spacing	Access Method
CDMAONE	2G	1.25 MHZ	CDMA
CDMA2000 1x	2.5G	1.25 MHZ	CDMA
CDMA2000 1xEV-DO	3G	1.25 MHZ	CDMA
CDMA2000 1xEV-DV	3G	1.25 MHZ	CDMA
UMTS	3G	5 MHZ	CDMA/TDMA
TD-SCDMA	3G	1.6 MHZ	CDMA

[0020] Before continuing with the discussion of figure 2 in paragraph 24, the cellular telephone systems of Table 1 will be briefly discussed. The CDMAONE cellular telephone system is the brand name for the standard reference IS95, which was the first CDMA system to gain widespread use. The initial specification for the system was IS95A, but its performance has since been upgraded under IS95B. Apart from voice, the CDMA cellular telephone system carries data at rates up to 14.4 kbps for IS95A and up to 115 kbps for IS95B.

[0021] The CDMA2000 1x cellular telephone system supports both voice and data capabilities within a standard 1.25 MHZ CDMA channel. This system doubles the voice capacity of CDMAONE systems and also supports high-speed data services.

Rates of 153 kbps are currently available and greater data transfer rates are planned.

[0022] The CDMA2000 1xEV-DO or Evolution Data Only standard builds on the CDMA2000 standard and provides peak data rate capability of over 2.45 Mbps on a downlink, i.e., from the base station to the user. The CDMA2000 1xEV-DV or Evolution Data and Voice cellular telephone system can simultaneously transmit voice and data with a peak data rate of 3.1 Mbps on the forward link or downlink and 384 kbps on the reverse link.

[0023] The UMTS (Universal Mobile Telecommunications System) utilizes Wideband CDMA with one 5 MHZ wide channel for both voice and data that provides speeds of up to 2 Mbps. The Time Division Synchronous CDMA or TD-SCDMA cellular telephone system, which is not popular in the United States, utilizes different time slots for base states and mobiles to communicate. It should be appreciated that the security system presented herein is not limited to any one particular cellular telephone system and systems not presented herein are within the teachings of the present invention. Additionally, the cellular telephone networks discussed herein may include systems which utilize the public switched telephone network

(PSTN), satellite-based networks, and other systems known in the art.

[0024] Also, the cellular telephone networks described herein may include or employ the Internet, and associated protocols, which can be utilized by some models of cellular telephones to receive images as well as audio and visual data. In the instances when data is transferred to or from the cellular telephone via the Internet, the cellular network 44 may include onsite (or home) or offsite servers that are setup by a security company or the homeowner to facilitate the transfer of the data.

[0025] The cellular telephone 30 may comprise any long-range, portable electronic device that provides for peer-to-peer telecommunications over a long distance. The cellular telephone 30 may comprise a personal digital assistant (PDA) or other electronic communication device. As illustrated, the cellular telephone 30 receives signals 46 and sends signals 48. The signals 46 from the control unit 40 to the cellular telephone 30 may include voice, images, and video signals. The signals 48 to the control unit 40 may comprise voice and control signals. In addition to the voice function of the cellular telephone 30, the image, video, and data services of

the cellular phone may be provided by a short message service (SMS) which utilizes text messaging, email, packet switching for access to the Internet to provide the content. Other suitable services for providing the content needed by the cellular telephone 30 include a multimedia message service (MMS) for sending and receiving photos and video. It should be appreciated, however, that the data and content received by the cellular telephone 30 is not limited to these services.

[0026] In an alternate embodiment, the video camera 22 may be integrated into the doorbell 29 and the integrated components disposed in communication with the control unit portion 40 such that the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30. The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification and it may take the form of a page, email, text message, instant message, phone call or any other type messaging and it may be achieved through any type of network including the illustrated cellular network 44. In response to the notification, the homeowner 16 may send a signal to the control unit portion 40 to either ignore the notification and event or accept more information including images or video

about the notification and event. It should be appreciated that the instant security system provides flexibility and selectability in the manner in which the homeowner 16 receives notifications and alerts.

[0027] Figure 3 depicts one embodiment of control and communication units 40 and 42 which form portions of the security system 10. A microcontroller 60 controls the communication unit 42 and interfaces with the cellular network 44. More specifically, the microcontroller 60 contains all the processing, memory, and interfaces needed for supporting the functionalities of the control unit 40 and communications unit 42. Numerous components are connected to the microcontroller 60; namely, the video camera 22, the exterior microphone 24, and the proximity detector 26 of the communication unit 42.

[0028] Further, the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74. Additionally, components, which are not illustrated as part of the communications unit 42, are connected to the

microcontroller 60. A video monitor 76 is coupled to the microcontroller 60 as well as to the video camera 22 and the exterior microphone 24 through a multiplexer 78. It should be appreciated that these components described in figure 3 may be connected to the microcontroller 60 and interconnected by wired connections, wireless connections, or a combination thereof.

[0029] The switch 62, which is under the control of the microcontroller 60, administers access to the exterior speaker 28 and determines which input device drives a signal to the exterior speaker 28. In the illustrated implementation, the possible input devices include the OGM player/recorder 64, an interior microphone 80 having a push-to-talk circuit 82, and the cellular telephone 30 via the cellular network interface 70 and the antenna 72. The OGM player/recorder 64 is a device for presenting pre-recorded messages to visitors at the homeowner's local or remote instructions. For example, the homeowner may have a pre-recorded greeting giving specific instructions on where to leave a package. The homeowner may utilize the control panel 66, which may be positioned proximate to the interior microphone 80, to send a signal to the OGM player/recorder 64 to tell a visitor from an overnight

delivery service where to leave a package. Alternatively, the homeowner may send a signal to the OGM player/recorder with the cellular telephone 30 as will be discussed in further detail hereinbelow.

[0030] In general, the control panel 66 permits the homeowner or other individual to manage the security system 10. In one implementation, the control panel 66 is onsite as well as accessible through the cellular telephone 30. The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system. By way of example, this feature permits the homeowner to utilize the cellular telephone 30 to notify a home security company or the police department in the instance of a break-in or other crime.

[0031] As previously discussed, the cellular network interface 70 and antenna 72 connect the security system 10 with the cellular network 44. The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74. Moreover, data stored in the data storage unit 74 may be

transferred to a different medium or played on the video monitor 76. The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24. The internal microphone 80 with the push-to-talk circuit 82 allows an onsite homeowner or, as previously discussed, another individual, to talk to a visitor. The video monitor 76 and interior microphone 80, when used together, provide a traditional monitor with intercom system for the homeowner.

[0032] Figure 4 depicts a flow chart of one embodiment of a method for providing security. At block 90, visual and audio communications are captured at an entry point. At block 92, at least a portion of the captured visual and audio communications are relayed to a cellular telephone. At block 94, the at least a portion of the captured visual and audio communications are rendered at the cellular telephone. At block 96, audio communications are captured at the cellular phone. The audio communications are relayed from the cellular phone to the entry point at block 98. At block 100, the audio communications are rendered at the entry point, thereby providing for duplexed audio communications and one-way visual

observation in order to achieve an improvement over the traditional video monitor and intercom system.

[0033] Figure 5 depicts a flow chart of another embodiment of a method for providing security. At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114. At the control unit, in one implementation, the data is stored in the data storage.

[0034] At block 118, if the cellular telephone has teleconferencing functionality or the ability to simultaneously receive both data and voice, then the method advances to block 136 (see paragraph 41). On the other hand, if this functionality is not present in the cellular telephone or if the cellular telephone network being utilized does not support this type of functionality, then the method advances

to block 120 wherein the control unit generates an image or video file that includes at least a portion of the visual or audio/visual data collected by the video camera and the exterior microphone. Whether an image file or video file is generated depends on the preferences programmed into the instant security system as well as the capabilities of the cellular network and the cellular telephone.

[0035] At block 122, the file is sent from the control unit to the cellular telephone via the cellular network. At block 124, an audio communication circuit between the control unit and the cellular telephone is completed. At block 126, the identity of the homeowner is authenticated. By way of example, in one implementation, the homeowner may be required to enter a passcode to authenticate the identity of the homeowner. If the homeowner does not enter the passcode, then the call is disconnected. As a further benefit, this type of call authentication or a similar system prevents the control unit from connecting the visitor with the homeowner's voicemail. Accordingly, the homeowner and security system do not provide an unintentional indication to the visitor that the homeowner is not home. Additionally, the homeowner may preprogram the control unit to play a pre-recorded message

from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.

[0036] At block 128, the homeowner is presented with a menu of options that give the homeowner choices in how to handle the visitor's arrival to the home. The homeowner may select an option in a conventional manner such as by pressing a number on the cellular telephone corresponding to the number of the option. Alternatively, for example, a voice activated system may be utilized. By way of example and not by way of limitation, Table 2 presents a matrix that illustrates a portion of the options that the security system of the present invention can make available to the homeowner. Each of these options will be briefly described before returning to the description of figure 5 in paragraph 40.

[0037] Table 2: Options for Cellular Telephones without Teleconferencing Functionality

Option Number	Option
1	No Action
2	Play a Pre-Recorded Greeting
3	Request Further Image or Video Data
4	Hear Audio Only
5	Duplexed Audio Communication
6	Notify Alarm Company
7	Conference Call

[0038] With respect to Option 1: No Action, the approaching individual that actuated the security system may be a family member returning home and entering the home through the front door. In this instance, the homeowner may wish to take no action. In this mode, the security system does not facilitate communication between the parties and the visitor is ignored by the security system.

[0039] With respect to Option 2: Play a Pre-Recorded Greeting, the approaching individual may be a delivery person that wishes to leave a package for the homeowner. The homeowner may select to play a pre-recorded greeting with

detailed instructions describing where to leave the package for the delivery person with the OGM player/recorder. It should be appreciated that the security system may be equipped with more than one pre-recorded greeting. By way of further example, the homeowner may be in a remote part of the home or property and play a pre-recorded greeting for a friend that has approached the doorway which politely asks the visiting friend to wait at the door for a couple of minutes. A submenu or other conventional means may be employed to offer the homeowner a choice of pre-recorded messages to play for the visitor.

[0040] With respect to Option 3: Request Further Image or Video Data, the initial file received by the homeowner at the cellular telephone may be blurred or the visitor in the doorway may not be clearly identifiable from the image or video. With this option, the homeowner requests an additional image or video. When this option is selected, since the cellular telephone does not have teleconferencing functionality or the ability to simultaneously receive both voice and data, the control unit temporarily disconnects from the cellular telephone, sends the second image or video file, and then reestablishes audio communication with the cellular

telephone. After the audio circuit is reestablished and optionally re-authenticated, the menu may be represented to the homeowner.

[0041] When Option 4: Hear Audio Only is selected by the homeowner, the homeowner chooses only to observe the visitor before taking further action, such as selecting a further option. Option 5: Duplexed Audio Communication permits the homeowner to have a verbal conversation with the visitor in the same manner as if the homeowner was present at the home and using the internal microphone. Option 6: Notify Alarm Company allows the homeowner to notify the alarm company or alternatively the police department of a potential or actual problem. This option is particularly important when the visitor is a perpetrator in the act of a crime such as breaking into the home. With respect to Option 7: Conference Call, the homeowner may conference call a third-party, such as a trusted neighbor that is home, into the conversation with the visitor. As alluded to, these options are exemplary of the robustness of the security system and these options may be original equipment manufacture (OEM) or programmed by the homeowner.

[0042] Returning now to the description of figure 5, as indicated by numeral 130, the homeowner selects Option 5: Duplexed Audio Communication to have a two-way conversation with the visitor. At block 134, the homeowner views the visual file. This operation may occur at any time or simultaneously with the operations described in blocks 124 through 132. The operations of blocks 132 and 134 permit the homeowner who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.

[0043] Returning now to decision block 118, for cellular telephones that have teleconferencing functionality or an equivalent thereof, at block 136, a communication circuit is established between the control unit and cellular telephone. As previously alluded to, by way of example, some cellular telephones provide for the simultaneous or near simultaneous transfer of voice and data by utilizing the cellular network in conjunction with the Internet. At block 138, similar to block 126, the identify of the homeowner is authenticated. Continuing to block 140, a menu of options, such as the exemplary menu of Table 3, is available to the homeowner.

[0044] Table 3: Options for Cellular Telephones with Teleconferencing or Equivalent Functionality

Option Number	Option
1	No Action
2	Play a Pre-Recorded Greeting
3	Observe Only
4	Duplexed Communication
5	Notify Alarm Company
6	Conference Call

[0045] These available options, where serve as non-limiting examples, are substantially equivalent to the options discussed at block 128. As indicated in figure 5, Option 4: Duplexed Communication is selected. Since the telephone has the ability to simultaneously receive data and voice communications, this option permits the cellular telephone to render a video file with substantially real time video visual and audio captured at the doorway of the home. Alternatively, streaming audio and video may be delivered. The homeowner is therefore allowed to see and hear the visitor while communicating with the visitor orally.

[0046] While this invention has been described with reference to illustrative embodiments, this description is not intended to be construed in a limiting sense. Various modifications and combinations of the illustrative embodiments as well as other embodiments of the invention, will be apparent to persons skilled in the art upon reference to the description. It is, therefore, intended that the appended claims encompass any such modifications or embodiments.

What is claimed is:

1. A security system comprising:

an entry point having an environment;

a video camera and an external microphone disposed in the entry point, the video camera and external microphone for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received cellular audio communications;

a control unit disposed in communication with the video camera, the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

a cellular telephone disposed remotely to the entry point and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control

unit, and rendering the at least one portion of entry point communications received from the control unit.

2. The system as recited in claim 1, wherein the entry point comprises a doorway.

3. The system as recited in claim 1, wherein the video camera and the external microphone are integrated.

4. The system as recited in claim 1, wherein the external microphone and speaker are integrated.

5. The system as recited in claim 1, wherein the control unit is disposed in communication with the video camera and the external microphone by a communication link selected from the group consisting of wireless links and physical links.

6. The system as recited in claim 1, wherein the at least one portion of the entry point visual and audio communications comprises data selected from the group consisting of audio data, at least one image and audio data, and streaming visual and audio data.

7. The system as recited in claim 1, wherein the cellular telephone comprises teleconferencing functionality.

8. The system as recited in claim 1, wherein the connection between the control unit and cellular telephone comprises a network connection over a cellular network.

9. A method for providing security, the method comprising:

capturing visual and audio communications at an entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point; and

rendering the audio communications at the entry point.

10. The method as recited in claim 9, wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone occur substantially simultaneously.

11. The method as recited in claim 9, wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone generate duplexed audio communication.

12. The method as recited in claim 9, further comprising forwarding the captured visual and audio communications to a data storage device located onsite to the entry point.

13. The method as recited in claim 9, further comprising forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

14. A security system comprising:

means for capturing visual and audio communications at an entry point;

means for relaying at least a portion of the captured visual and audio communications to a cellular phone;

means for rendering the least a portion of the captured visual and audio communications at the cellular phone;

means for capturing audio communications at the cellular phone;

means for relaying the audio communications from the cellular phone to the entry point; and

means for rendering the audio communications at the entry point.

15. The system as recited in claim 14, wherein the means for relaying at least a portion of the captured visual and audio communications and means for relaying the audio communications for the cellular phone operate substantially simultaneously.

16. The system as recited in claim 14, wherein the means for relaying at least a portion of the captured visual and audio communications and the means for relaying the audio communications for the cellular phone operate to provide duplexed audio communication.

17. The system as recited in claim 14, further comprising means for forwarding the captured visual and audio communications to means for data storage located onsite to the entry point.

18. The system as recited in claim 14, further comprising means for forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

19. A system for providing security, the system comprising:

a doorway to a home having an environment;

a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway;

an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;

a control unit disposed in communication with the video camera, the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit,

the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.

20. The system as recited in claim 19, wherein the home comprises a structure selected from the group consisting of a house, an apartment, a loft, a condominium, and a townhouse.

SECURITY SYSTEM AND METHOD FOR USE OF SAME

ABSTRACT OF THE DISCLOSURE

A security system and method for use of the same are disclosed that provide for remote surveillance. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point.

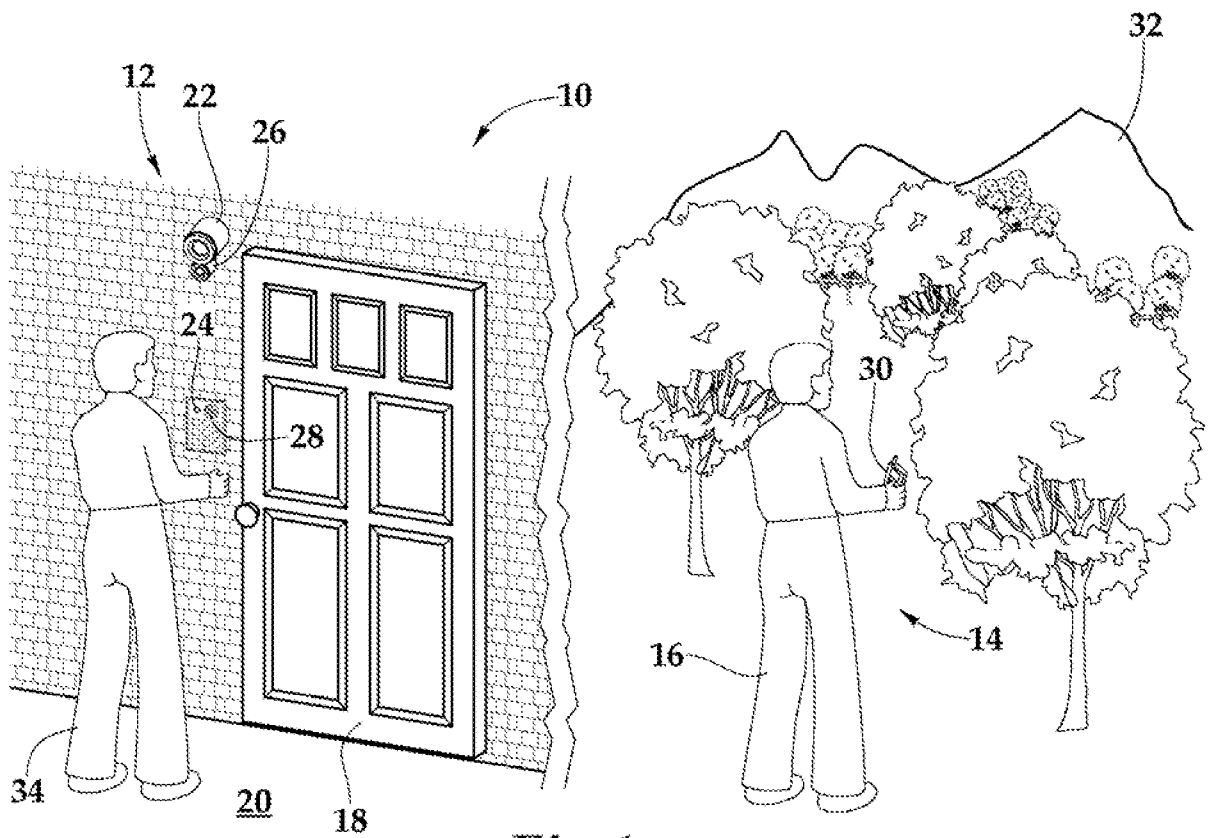


Fig. 1

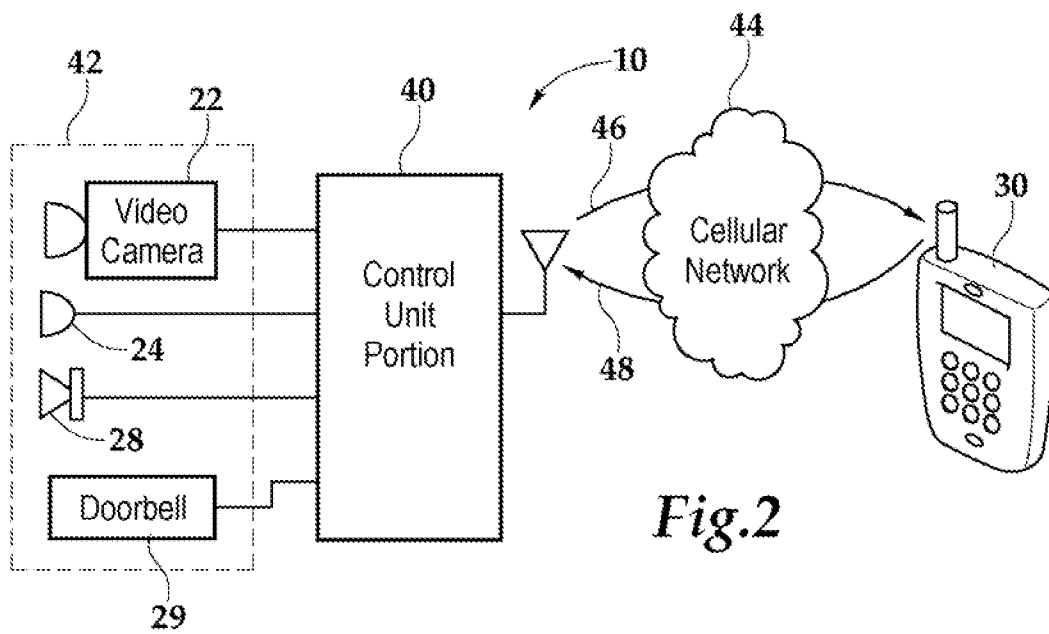
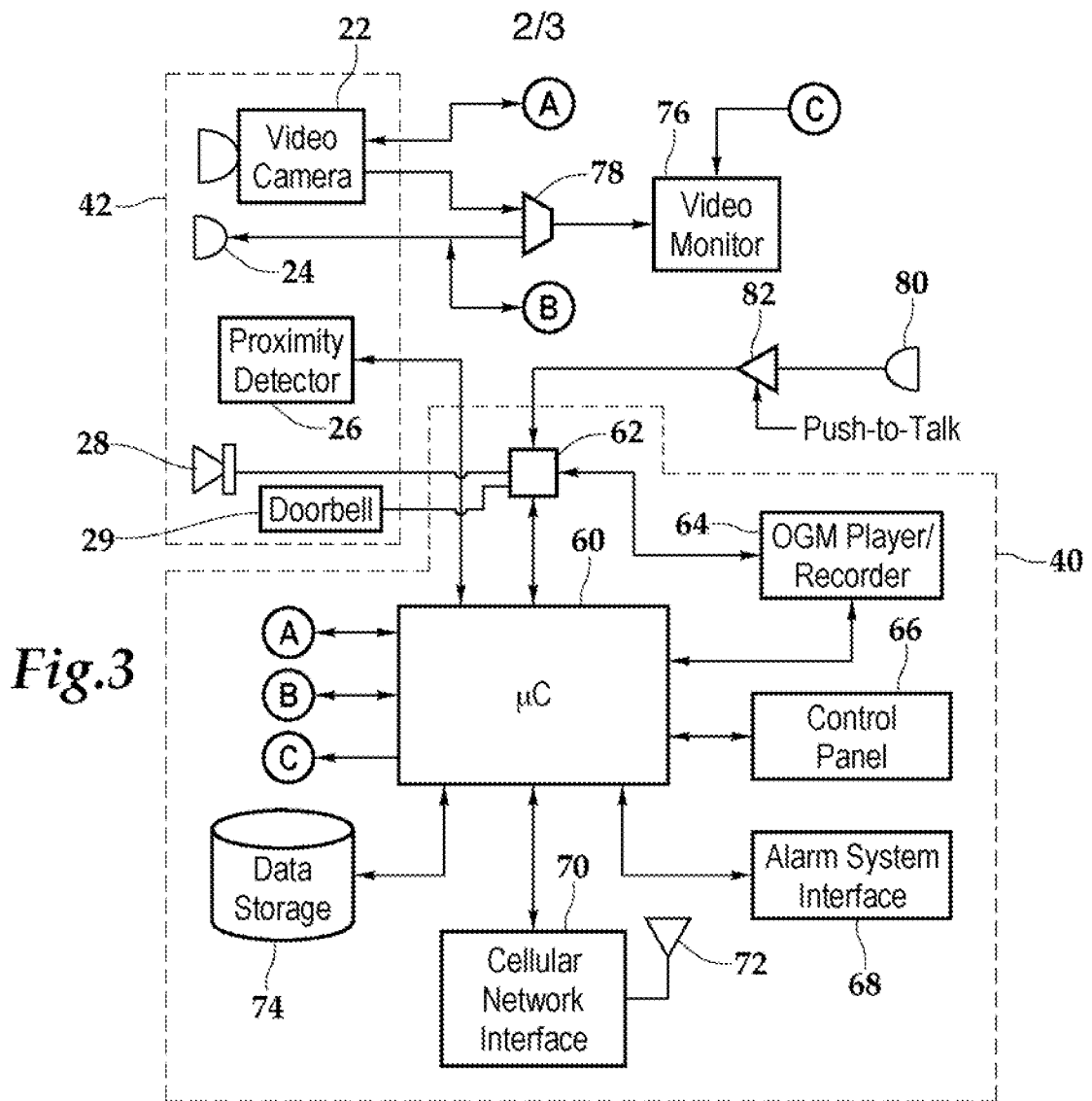
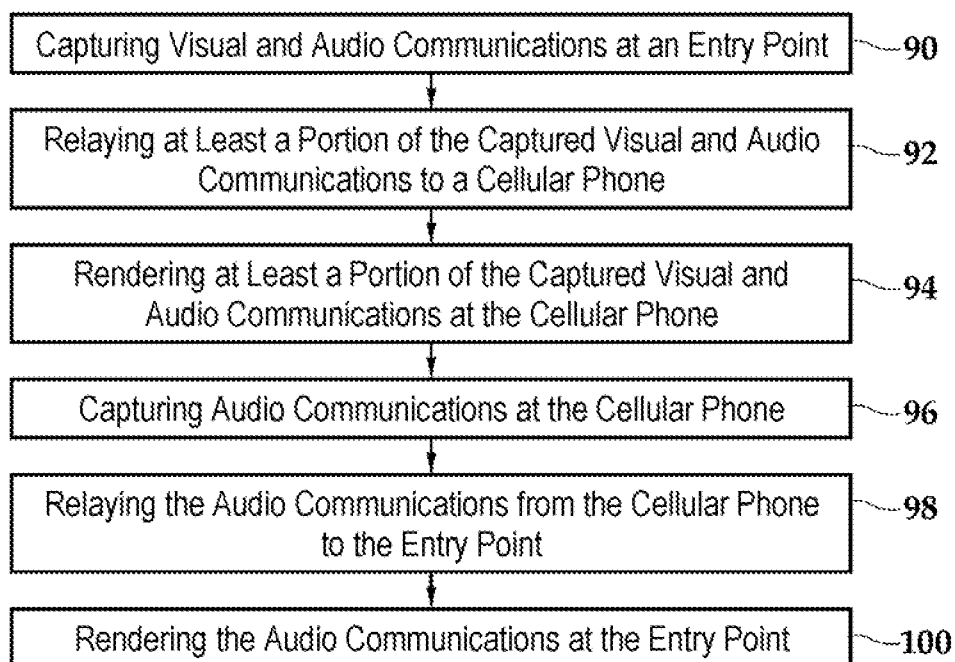


Fig. 2



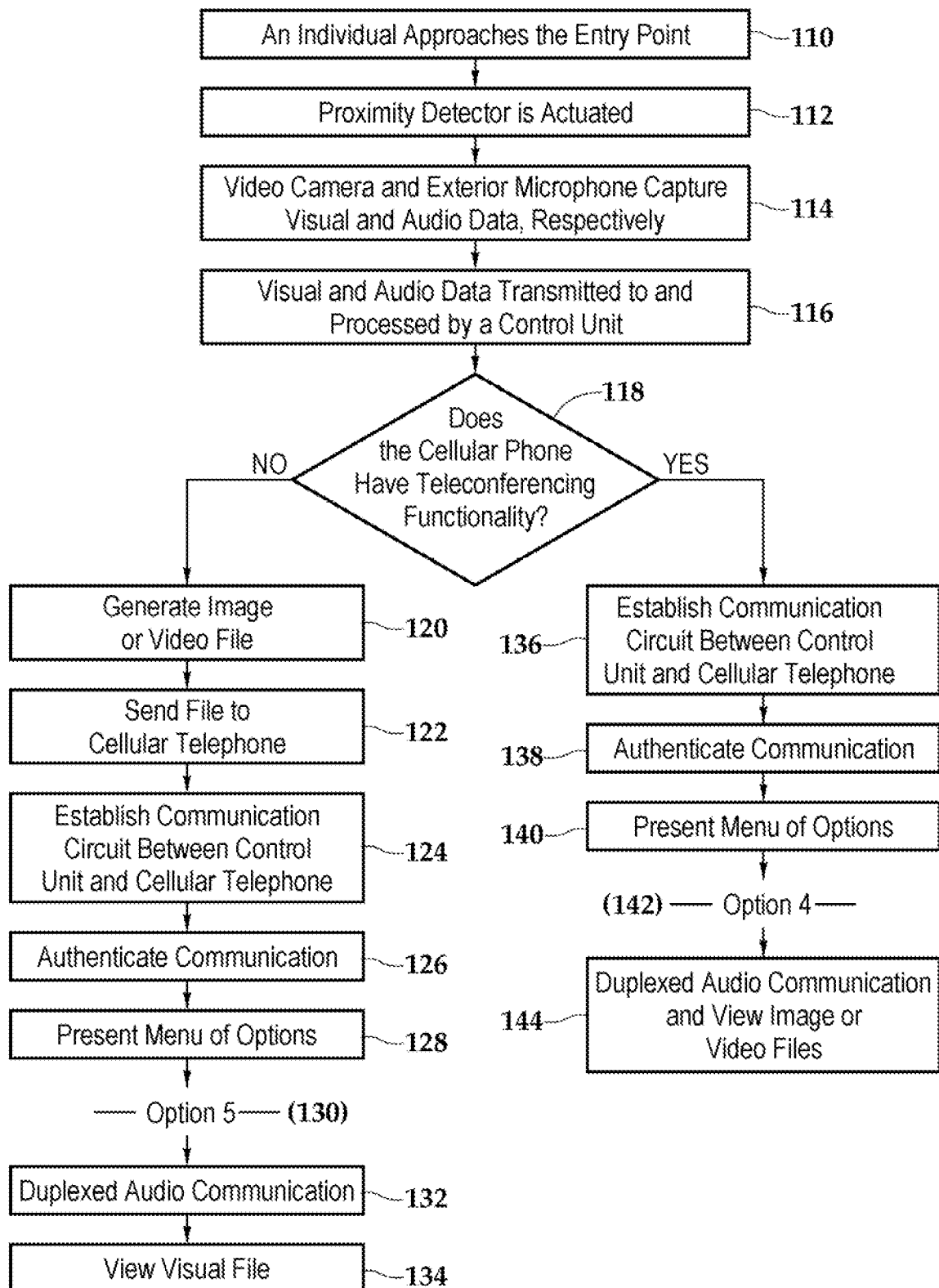


Fig.5

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

This declaration is of the following type: (check one)

- ☒ Original
- ☐ Design
- ☐ Supplemental
- ☐ National Stage of PCT

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SECURITY SYSTEM AND METHOD FOR USE OF SAME

the specification of which: (check one)

- ☒ is attached hereto;
- ☐ was filed on _____, as Application Serial No. _____, and was amended on _____ (if applicable);
- ☐ was described and claimed in PCT International Application No. _____ filed on _____ and amended under PCT Article 19 on _____ (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a), and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application of which priority is claimed:

PRIOR FOREIGN APPLICATION(S)

<u>Number</u>	<u>Country</u>	<u>Day/Month/Year Filed</u>	<u>Priority Claimed</u>
---------------	----------------	-----------------------------	-------------------------

This declaration is of the following type: (if applicable)

- ☐ Divisional
- ☐ Continuation
- ☐ Continuation-in-part

I hereby claim the benefit under Title 35, United States Code, §§ 119, 120, and 365 and Title 37, Code of Federal Regulations, §1.78 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States Application in the manner provided by the first paragraph of Title 35, United States Code, §112, we hereby acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>Application Serial No.</u>	<u>Filing Date</u>	<u>Status (patented, pending, abandoned)</u>
-------------------------------	--------------------	--

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) jointly and severally to prosecute this application and transact all business in the Patent and Trademark Office connected therewith and to file any and all International Application(s) with respect thereto and to act on my behalf before the competent International Authorities with respect thereto: Scott T. Griggs (Reg. No. 48,331); Dennis T. Griggs (Reg. No. 27,790); and Grady K. Bergen (Reg. No. 37,587) of Griggs Bergen LLP, Bank of America Plaza, 901 Main Street, Suite 6300, Dallas, Texas 75202.

SEND CORRESPONDENCE TO:

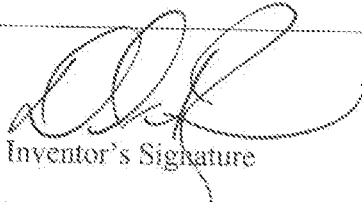
Customer No. 31,814

DIRECT TELEPHONE CALLS TO:

Scott T. Griggs at 214.653.2400

I hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Number One.

Duke W. Zinser		10.30.06
Full Name	Inventor's Signature	Date
Garland, Texas	7514 Briarglen Court Garland, Texas 75044-2426	US
Residence	Post Office Address	Citizenship

Attorney Docket No.: 1048.1001
Customer No.: 31,814

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application: Zinser, Duke W.
Serial No.: Pending
Confirmation No.: Pending
Filed: November 14, 2006
Art Unit: Pending
Examiner: Pending
For: Security System and Method for Use of Same

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Information Disclosure Statement

Dear Sir:

As listed on the accompanying form PTO/SB/08, submitted herewith are the indicated references which Applicant believes may be material to the examination of the above-identified application, and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. §1.56.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made, an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists. Further, the filing of this information disclosure statement shall not be construed as an admission against interest

in any manner. Written notification that the enclosed references have been considered in their entirety by return of a copy of the enclosed form, completed by the Examiner, is respectfully requested.

This Information Disclosure Statement is being filed within three months of the filing date of the national application other than a continued prosecution application under §1.53(d) or within three months of the date of entry of the national stage as set forth in §1.491 in an international application. (37 C.F.R. §1.97(b)).

Dated this 14th day of November, 2006.

Respectfully submitted:

/Scott Griggs/

Scott T. Griggs
Reg. No. 48,331

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **ONE** of **TWO****Complete if Known**

Application Number	Pending
Filing Date	November 14, 2006
First Named Inventor	Zinser, Duke W.
Art Unit	Pending Assignment
Examiner Name	Pending Assignment
Attorney Docket Number	1048.1001

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (# known)			
		US- 5,861,804	01-19-1999	Fansa et al.	
		US- 5,907,352	05-25-1999	Gilley	
		US- 6,023,223	02-08-2000	Baxter, Jr.	
		US- 6,060,994	05-09-2000	Chen	
		US- 6,097,429	08-01-2000	Seeley et al.	
		US- 6,271,752	08-07-2001	Vaios	
		US- 6,429,893	08-06-2002	Xin	
		US- 6,466,261	10-15-2002	Nakamura	
		US- 6,476,858	11-05-2002	Ramirez Diaz et al.	
		US- 6,542,078	04-01-2003	Script et al.	
		US- 6,714,237	03-30-2004	Lee et al.	
		US- 6,873,261	03-29-2005	Anthony et al.	
		US- 6,965,313	11-15-2005	Saylor et al.	
		US- 7,020,474	03-28-2006	Scott	
		US- 7,030,752	04-18-2006	Tyroler	
		US- 7,015,943	03-21-2006	Chiang	
		US- 7,034,681	04-25-2006	Yamamoto	
		US- 2006/0022816	02-02-2006	Yukawa	
		US- 6,049,353	04-11-2000	Gray	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ "Number" ⁴ "Kind Code" ⁵ (# known)				

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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(Use as many sheets as necessary)

Sheet	TWO	of	TWO
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Complete if Known

Application Number	Pending
Filing Date	November 14, 2006
First Named Inventor	Zinser, Duke W.
Art Unit	Pending Assignment
Examiner Name	Pending Assignment
Attorney Docket Number	1048.1001

[illegible][illegible]

Examiner Signature		Date Considered	
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:				
Filing Date:				
Title of Invention:	Security System and Method for Use of Same			
First Named Inventor/Applicant Name:	Duke W. Zinser			
Filer:	Scott Taylor Griggs			
Attorney Docket Number:	1048.1001			
Filed as Small Entity				
Utility Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	75	75
Utility Search Fee	2111	1	250	250
Utility Examination Fee	2311	1	100	100
Pages:				
Claims:				
Independent claims in excess of 3	2201	1	100	100
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				525

Electronic Acknowledgement Receipt

EFS ID:	1313587
Application Number:	11559808
International Application Number:	
Confirmation Number:	4697
Title of Invention:	Security System and Method for Use of Same
First Named Inventor/Applicant Name:	Duke W. Zinser
Customer Number:	31814
Filer:	Scott Taylor Griggs
Filer Authorized By:	
Attorney Docket Number:	1048.1001
Receipt Date:	14-NOV-2006
Filing Date:	
Time Stamp:	18:19:30
Application Type:	Utility

Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$525
RAM confirmation Number	759
Deposit Account	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)
-----------------	----------------------	-----------	------------------	------------------	------------------

1		Security_System_and_Method_for_Use_of_Same.pdf	451161	yes	38				
	Multipart Description/PDF files in .zip description								
	Document Description		Start	End					
	Specification		1	25					
	Claims		26	34					
	Abstract		35	35					
	Drawings		36	38					
Warnings:									
Information:									
2	Oath or Declaration filed	Combined_Declaration_and_Power_of_Attorney.pdf	586770	no	3				
Warnings:									
Information:									
3	Information Disclosure Statement (IDS) Filed	Information_Disclosure_Statement.pdf	381493	no	4				
Warnings:									
Information:									
This is not an USPTO supplied IDS fillable form									
4	Fee Worksheet (PTO-875)	fee-info.pdf	8474	no	2				
Warnings:									
Information:									
Total Files Size (in bytes):			1427898						
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p>									

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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

11/559,808**APPLICATION AS FILED – PART I**

(Column 1)

(Column 2)

SMALL ENTITY**OTHER THAN
SMALL ENTITY**

FOR	NUMBER FILED	NUMBER EXTRA
BASIC FEE (37 CFR 1.16(a), (b), or (c))		
SEARCH FEE (37 CFR 1.16(k), (i), or (m))		
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		
TOTAL CLAIMS (37 CFR 1.16(i))	20 minus 20 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	4 minus 3 =	1
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR	
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))		

RATE (\$)	FEE (\$)
	75
	250
	100
X\$25=	
X\$100=	100
N/A	
TOTAL	525

OR

RATE (\$)	FEE (\$)
X\$50	
X\$200=	
N/A	
TOTAL	

* If the difference in column 1 is less than zero, enter "0" in column 2.

APPLICATION AS AMENDED – PART II

(Column 1)

(Column 2)

(Column 3)

SMALL ENTITY

OR

**OTHER THAN
SMALL ENTITY**

AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total (37 CFR 1.16(i))	*		Minus	**	=
Independent (37 CFR 1.16(h))	*		Minus	***	=
Application Size Fee (37 CFR 1.16(s))					
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					

RATE (\$)	ADDITIONAL FEE (\$)
X =	
X =	
N/A	
TOTAL ADD'T FEE	

OR

RATE (\$)	ADDITIONAL FEE (\$)
X =	
X =	
N/A	
TOTAL ADD'T FEE	

(Column 1)

(Column 2)

(Column 3)

SMALL ENTITY

OR

**OTHER THAN
SMALL ENTITY**

AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total (37 CFR 1.16(i))	*		Minus	**	=
Independent (37 CFR 1.16(h))	*		Minus	***	=
Application Size Fee (37 CFR 1.16(s))					
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					

RATE (\$)	ADDITIONAL FEE (\$)
X =	
X =	
N/A	
TOTAL ADD'T FEE	

OR

RATE (\$)	ADDITIONAL FEE (\$)
X =	
X =	
N/A	
TOTAL ADD'T FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

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Patent Assignment Abstract of Title

Total Assignments: 3

Application #: 11559808 **Filing Dt:** 11/14/2006 **Patent #:** 7583191 **Issue Dt:** 09/01/2009
PCT #: NONE **Intl Reg #:** **Publication #:** US20080111684 **Pub Dt:** 05/15/2008
Inventor: Duke W. Zinser
Title: SECURITY SYSTEM AND METHOD FOR USE OF SAME

Assignment: 1

Reel/Frame: 047761 / 0265 **Received:** 10/05/2018 **Recorded:** 10/05/2018 **Mailed:** 12/14/2018 **Pages:** 15

Conveyance: SECURITY INTEREST (SEE DOCUMENT FOR DETAILS).

Assignor: SKYBELL TECHNOLOGIES, INC.

Exec Dt: 10/03/2018

Assignee: ALARM.COM INCORPORATED

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Assignment: 2

Reel/Frame: 048565 / 0879 **Received:** 03/11/2019 **Recorded:** 03/11/2019 **Mailed:** 03/12/2019 **Pages:** 4

Conveyance: RELEASE BY SECURED PARTY (SEE DOCUMENT FOR DETAILS).

Assignor: ALARM.COM INCORPORATED

Exec Dt: 03/11/2019

Assignee: SKYBELL TECHNOLOGIES, INC.

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Assignment: 3

Reel/Frame: 067753 / 0523 **Received:** 06/18/2024 **Recorded:** 06/18/2024 **Mailed:** NONE **Pages:** 2

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignor: ZINSER IRREVOCABLE TRUST

Exec Dt: 06/12/2024

Assignee: ZINSER, DUKE

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Search Results as of: 06/19/2024 10:57 PM

Litigation Search Report CRU 3999

Reexamination Control No. 90/019,542

To: Examiner

From: Renee Preston

Location: CRU

Location: CRU 3999

Art Unit: 3992

Phone: (571) 272-1607

Date: 06/19/2024

E-mail: renee.preston@uspto.gov

Search Notes

U.S. Patent No. 7,583,191

1. Performed a KeyCite Search in Westlaw, which retrieves all history on the patent including any litigation.
2. Performed a search on the patent in Lexis CourtLink for any open dockets or closed cases.
3. Performed a search in Lexis in the Federal Courts and Administrative Materials databases for any cases found.
4. Performed a search in Lexis in the IP Journal and Periodicals database for any articles on the patent.
5. Performed a search in Lexis in the news databases for any articles about the patent or any articles about litigation on this patent.

Litigation: Cases Found

Status	Docket	Description
Closed	8:22cv33	Vivint Inc. V. Sb Ip Holdings Llc

Paper No. 06/19/2024

Citing References (100)

Treatment	Title	Date	Type	Depth	Headnote(s)
Cited by	1. Defendant SkyBell Technologies, Inc.'s First Amended Answer, Defenses, and Counterclaims EYETALK365, LLC, Plaintiff, v. SKYBELL TECHNOLOGIES, INC., Defendant. 2017 WL 11114070, *1+ , W.D.N.C. (Trial Pleading)	May 24, 2017	Petition		—
Cited by	2. Defendant SkyBell Technologies, Inc.'s Answer, Defenses, and Counterclaims EYETALK365, LLC, Plaintiff, v. SKYBELL TECHNOLOGIES, INC., Defendant. 2017 WL 4330857, *1+ , W.D.N.C. (Trial Pleading)	May 04, 2017	Petition		—
Cited by	3. Answer to SBIP's Complaint SB IP HOLDINGS, LLC, Plaintiff, v. VIVINT SMART HOME, INC. and Vivint Inc., Defendant and counterclaim plaintiffs, v. SKYBELL TECHNOLOGIES, INC and SB... 2021 WL 6884760, *1 , E.D.Tex. (Trial Pleading)	May 14, 2021	Petition		—
—	4. ALARM SYSTEMS HAVING MULTIPLE COMMUNICATION ALTERNATIVES FOR CONTACTING A MONITORING SERVICE AND METHODS OF OPERATING THE SAME Out Of Place US PAT 8457589 , U.S. PTO Utility	June 04, 2013	Patents	—	—
—	5. SECURITY SYSTEM FOR USE AT E.G. TOWNHOUSE, HAS CELLULAR TELEPHONE TRANSMITTING ENTRY POINT VISUAL AND AUDIO COMMUNICATIONS TO CONTROL UNIT, AND RENDERING PORTION OF ENTRY POINT COMMUNICATIONS RECEIVED FROM CONTROL UNIT Out Of Place DWPI 2008-G02150	Nov. 14, 2006	DWPI	—	—
—	6. RF 048565/0879 Out Of Place	Mar. 11, 2019	Assignments	—	—
—	7. RF 047761/0265 Out Of Place	Oct. 05, 2018	Assignments	—	—
—	8. POWER OUTLET CAMERAS Out Of Place WO 2018226898 A1 , WIPO PCT Application	Dec. 13, 2018	Patents	—	—
—	9. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of Place WO 2015031812 A1 , WIPO PCT Application	Mar. 05, 2015	Patents	—	—
—	10. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of Place WO 2015013275 A1 , WIPO PCT Application	Jan. 29, 2015	Patents	—	—
—	11. CONTROL SYSTEM USER INTERFACE Out Of Place US PAT 12003387 , U.S. PTO Utility	June 04, 2024	Patents	—	—
—	12. ACTIVATION OF A HOME AUTOMATION CONTROLLER Out Of Place US PAT 11997584 , U.S. PTO Utility	May 28, 2024	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	13. PREMISES SYSTEM AUTOMATION <small>Out Of File</small> US PAT 11991306 , U.S. PTO Utility	May 21, 2024	Patents	—	—
—	14. VIRTUAL DEVICE SYSTEMS AND METHODS <small>Out Of File</small> US PAT 11962672 , U.S. PTO Utility	Apr. 16, 2024	Patents	—	—
—	15. SYSTEM FOR FACILITATING ACCESS TO A SECURED AREA <small>Out Of File</small> US PAT 11941929 , U.S. PTO Utility	Mar. 26, 2024	Patents	—	—
—	16. MEDIA CONTENT MANAGEMENT <small>Out Of File</small> US PAT 11943301 , U.S. PTO Utility	Mar. 26, 2024	Patents	—	—
—	17. POWER OUTLET CAMERAS <small>Out Of File</small> US PAT 11916691 , U.S. PTO Utility	Feb. 27, 2024	Patents	—	—
—	18. GATEWAY REGISTRY METHODS AND SYSTEMS <small>Out Of File</small> US PAT 11916870 , U.S. PTO Utility	Feb. 27, 2024	Patents	—	—
—	19. COMMUNICATION PROTOCOLS OVER INTERNET PROTOCOL (IP) NETWORKS <small>Out Of File</small> US PAT 11916928 , U.S. PTO Utility	Feb. 27, 2024	Patents	—	—
—	20. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of File</small> US PAT 11909549+ , U.S. PTO Utility	Feb. 20, 2024	Patents	—	—
—	21. METHOD, SYSTEM AND APPARATUS FOR AUTOMATED REPORTING OF ACCOUNT AND SENSOR ZONE INFORMATION TO A CENTRAL STATION <small>Out Of File</small> US PAT 11900790 , U.S. PTO Utility	Feb. 13, 2024	Patents	—	—
—	22. NETWORKED TOUCHSCREEN WITH INTEGRATED INTERFACES <small>Out Of File</small> US PAT 11893874 , U.S. PTO Utility	Feb. 06, 2024	Patents	—	—
—	23. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of File</small> US PAT 11894986 , U.S. PTO Utility	Feb. 06, 2024	Patents	—	—
—	24. DOORBELL COMMUNICATION AND ELECTRICAL SYSTEMS <small>Out Of File</small> US PAT 11889009 , U.S. PTO Utility	Jan. 30, 2024	Patents	—	—
—	25. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of File</small> US PAT 11854376 , U.S. PTO Utility	Dec. 26, 2023	Patents	—	—
—	26. CONTROLLING DATA ROUTING IN PREMISES MANAGEMENT SYSTEMS <small>Out Of File</small> US PAT 11831462 , U.S. PTO Utility	Nov. 28, 2023	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	27. NETWORKED TOUCHSCREEN WITH INTEGRATED INTERFACES <small>Out Of Place</small> US PAT 11824675 , U.S. PTO Utility	Nov. 21, 2023	Patents	—	—
—	28. INTEGRATED SECURITY SYSTEM WITH PARALLEL PROCESSING ARCHITECTURE <small>Out Of Place</small> US PAT 11815969 , U.S. PTO Utility	Nov. 14, 2023	Patents	—	—
—	29. AUTOMATION SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 11816323 , U.S. PTO Utility	Nov. 14, 2023	Patents	—	—
—	30. METHOD AND SYSTEM FOR MANAGING COMMUNICATION CONNECTIVITY <small>Out Of Place</small> US PAT 11809174 , U.S. PTO Utility	Nov. 07, 2023	Patents	—	—
—	31. OUTDOOR SECURITY SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11810436 , U.S. PTO Utility	Nov. 07, 2023	Patents	—	—
—	32. CROSS-CLIENT SENSOR USER INTERFACE IN AN INTEGRATED SECURITY NETWORK <small>Out Of Place</small> US PAT 11810445 , U.S. PTO Utility	Nov. 07, 2023	Patents	—	—
—	33. COMMUNICATION PROTOCOLS OVER INTERNET PROTOCOL (IP) NETWORKS <small>Out Of Place</small> US PAT 11811845 , U.S. PTO Utility	Nov. 07, 2023	Patents	—	—
—	34. MOBILE PREMISES AUTOMATION PLATFORM <small>Out Of Place</small> US PAT 11792036 , U.S. PTO Utility	Oct. 17, 2023	Patents	—	—
—	35. COMMUNICATION AND AUTOMATION IN A PREMISES MANAGEMENT SYSTEM <small>Out Of Place</small> US PAT 11792330 , U.S. PTO Utility	Oct. 17, 2023	Patents	—	—
—	36. AUTOMATION SYSTEM WITH MOBILE INTERFACE <small>Out Of Place</small> US PAT 11782394 , U.S. PTO Utility	Oct. 10, 2023	Patents	—	—
—	37. HARDWARE CONFIGURABLE SECURITY, MONITORING AND AUTOMATION CONTROLLER HAVING MODULAR COMMUNICATION PROTOCOL INTERFACES <small>Out Of Place</small> US PAT 11778534 , U.S. PTO Utility	Oct. 03, 2023	Patents	—	—
—	38. DOORBELL COMMUNICATIONS SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11764990+ , U.S. PTO Utility	Sep. 19, 2023	Patents	—	—
—	39. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 11757834 , U.S. PTO Utility	Sep. 12, 2023	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	40. VIRTUAL DEVICE SYSTEMS AND METHODS Out Of File US PAT 11758026 , U.S. PTO Utility	Sep. 12, 2023	Patents	—	—
—	41. BIDIRECTIONAL SECURITY SENSOR COMMUNICATION FOR A PREMISES SECURITY SYSTEM Out Of File US PAT 11750414 , U.S. PTO Utility	Sep. 05, 2023	Patents	—	—
—	42. INTEGRATED CLOUD SYSTEM WITH LIGHTWEIGHT GATEWAY FOR PREMISES AUTOMATION Out Of File US PAT 11729255 , U.S. PTO Utility	Aug. 15, 2023	Patents	—	—
—	43. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS Out Of File US PAT 11722896 , U.S. PTO Utility	Aug. 08, 2023	Patents	—	—
—	44. INTEGRATED CLOUD SYSTEM FOR PREMISES AUTOMATION Out Of File US PAT 11711234 , U.S. PTO Utility	July 25, 2023	Patents	—	—
—	45. MODULAR ELECTRONIC DISPLAY PLATFORM Out Of File US PAT 11706045 , U.S. PTO Utility	July 18, 2023	Patents	—	—
—	46. METHODS AND SYSTEMS FOR DATA COMMUNICATION Out Of File US PAT 11706279 , U.S. PTO Utility	July 18, 2023	Patents	—	—
—	47. SECURITY NETWORK INTEGRATING SECURITY SYSTEM AND NETWORK DEVICES Out Of File US PAT 11700142 , U.S. PTO Utility	July 11, 2023	Patents	—	—
—	48. PREMISES SYSTEM MANAGEMENT USING STATUS SIGNAL Out Of File US PAT 11677577 , U.S. PTO Utility	June 13, 2023	Patents	—	—
—	49. METHOD AND SYSTEM FOR PROVIDING ALTERNATE NETWORK ACCESS Out Of File US PAT 11663902 , U.S. PTO Utility	May 30, 2023	Patents	—	—
—	50. SERVER-BASED NOTIFICATION OF ALARM EVENT SUBSEQUENT TO COMMUNICATION FAILURE WITH ARMED SECURITY SYSTEM Out Of File US PAT 11665617 , U.S. PTO Utility	May 30, 2023	Patents	—	—
—	51. INTEGRATED SECURITY SYSTEM WITH PARALLEL PROCESSING ARCHITECTURE Out Of File US PAT 11656667 , U.S. PTO Utility	May 23, 2023	Patents	—	—
—	52. DOORBELL COMMUNITIES Out Of File US PAT 11651665 , U.S. PTO Utility	May 16, 2023	Patents	—	—
—	53. DOORBELL COMMUNITIES Out Of File US PAT 11651668 , U.S. PTO Utility	May 16, 2023	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	54. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 11646907 , U.S. PTO Utility	May 09, 2023	Patents	—	—
—	55. INTEGRATED CLOUD SYSTEM WITH LIGHTWEIGHT GATEWAY FOR PREMISES AUTOMATION <small>Out Of Place</small> US PAT 11641391 , U.S. PTO Utility	May 02, 2023	Patents	—	—
—	56. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11641452 , U.S. PTO Utility	May 02, 2023	Patents	—	—
—	57. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 11632308 , U.S. PTO Utility	Apr. 18, 2023	Patents	—	—
—	58. PREMISES MANAGEMENT NETWORKING <small>Out Of Place</small> US PAT 11625008 , U.S. PTO Utility	Apr. 11, 2023	Patents	—	—
—	59. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 11625161 , U.S. PTO Utility	Apr. 11, 2023	Patents	—	—
—	60. MANAGEMENT OF A SECURITY SYSTEM AT A PREMISES <small>Out Of Place</small> US PAT 11626006 , U.S. PTO Utility	Apr. 11, 2023	Patents	—	—
—	61. PREMISE MANAGEMENT SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11615697 , U.S. PTO Utility	Mar. 28, 2023	Patents	—	—
—	62. INTEGRATED CLOUD SYSTEM FOR PREMISES AUTOMATION <small>Out Of Place</small> US PAT 11616659 , U.S. PTO Utility	Mar. 28, 2023	Patents	—	—
—	63. COMMUNICATION PROTOCOLS OVER INTERNET PROTOCOL (IP) NETWORKS <small>Out Of Place</small> US PAT 11611568 , U.S. PTO Utility	Mar. 21, 2023	Patents	—	—
—	64. PREMISES MANAGEMENT CONFIGURATION AND CONTROL <small>Out Of Place</small> US PAT 11601397 , U.S. PTO Utility	Mar. 07, 2023	Patents	—	—
—	65. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 11601810 , U.S. PTO Utility	Mar. 07, 2023	Patents	—	—
—	66. SERVER-BASED NOTIFICATION OF ALARM EVENT SUBSEQUENT TO COMMUNICATION FAILURE WITH ARMED SECURITY SYSTEM <small>Out Of Place</small> US PAT 11601865 , U.S. PTO Utility	Mar. 07, 2023	Patents	—	—
—	67. SYSTEM FOR DATA ROUTING IN NETWORKS <small>Out Of Place</small> US PAT 11595364 , U.S. PTO Utility	Feb. 28, 2023	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	68. PREMISES MANAGEMENT CONFIGURATION AND CONTROL <small>Out Of Place</small> US PAT 11588787 , U.S. PTO Utility	Feb. 21, 2023	Patents	—	—
—	69. SYSTEMS AND METHODS FOR DEVICE COMMUNICATION <small>Out Of Place</small> US PAT 11582065 , U.S. PTO Utility	Feb. 14, 2023	Patents	—	—
—	70. SYSTEM FOR FACILITATING ACCESS TO A SECURED AREA <small>Out Of Place</small> US PAT 11574512 , U.S. PTO Utility	Feb. 07, 2023	Patents	—	—
—	71. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11575537 , U.S. PTO Utility	Feb. 07, 2023	Patents	—	—
—	72. SYSTEM AND METHOD FOR FACILITATING ACCESS TO A SECURED AREA <small>Out Of Place</small> US PAT 11562610 , U.S. PTO Utility	Jan. 24, 2023	Patents	—	—
—	73. CUSTOM CONTENT FOR PREMISES MANAGEMENT <small>Out Of Place</small> US PAT 11553399 , U.S. PTO Utility	Jan. 10, 2023	Patents	—	—
—	74. INTEGRATED SECURITY SYSTEM WITH PARALLEL PROCESSING ARCHITECTURE <small>Out Of Place</small> US PAT 11537186 , U.S. PTO Utility	Dec. 27, 2022	Patents	—	—
—	75. SECURITY SYSTEM WITH NETWORKED TOUCHSCREEN <small>Out Of Place</small> US PAT 11496568 , U.S. PTO Utility	Nov. 08, 2022	Patents	—	—
—	76. FORMING A SECURITY NETWORK INCLUDING INTEGRATED SECURITY SYSTEM COMPONENTS AND NETWORK DEVICES <small>Out Of Place</small> US PAT 11489812 , U.S. PTO Utility	Nov. 01, 2022	Patents	—	—
—	77. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 11477417 , U.S. PTO Utility	Oct. 18, 2022	Patents	—	—
—	78. PREMISES MANAGEMENT NETWORKING <small>Out Of Place</small> US PAT 11449012 , U.S. PTO Utility	Sep. 20, 2022	Patents	—	—
—	79. SECURITY NETWORK INTEGRATING SECURITY SYSTEM AND NETWORK DEVICES <small>Out Of Place</small> US PAT 11451409 , U.S. PTO Utility	Sep. 20, 2022	Patents	—	—
—	80. VISITOR DETECTION, FACIAL RECOGNITION, AND ALERT SYSTEM AND PROCESSES FOR ASSISTING MEMORY-CHALLENGED PATIENTS TO RECOGNIZE ENTRYWAY VISITORS <small>Out Of Place</small> US PAT 11436906 , U.S. PTO Utility	Sep. 06, 2022	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	81. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS Out Of Place US PAT 11423756 , U.S. PTO Utility	Aug. 23, 2022	Patents	—	—
—	82. FORMING A SECURITY NETWORK INCLUDING INTEGRATED SECURITY SYSTEM COMPONENTS Out Of Place US PAT 11424980 , U.S. PTO Utility	Aug. 23, 2022	Patents	—	—
—	83. ACTIVATION OF GATEWAY DEVICE Out Of Place US PAT 11418518 , U.S. PTO Utility	Aug. 16, 2022	Patents	—	—
—	84. METHODS AND SYSTEMS FOR IMPROVED SYSTEM PERFORMANCE Out Of Place US PAT 11418572 , U.S. PTO Utility	Aug. 16, 2022	Patents	—	—
—	85. AUTOMATION SYSTEM USER INTERFACE WITH THREE-DIMENSIONAL DISPLAY Out Of Place US PAT 11410531 , U.S. PTO Utility	Aug. 09, 2022	Patents	—	—
—	86. METHODS AND SYSTEMS FOR DATA COMMUNICATION Out Of Place US PAT 11412027 , U.S. PTO Utility	Aug. 09, 2022	Patents	—	—
—	87. MEDIA CONTENT MANAGEMENT Out Of Place US PAT 11405463 , U.S. PTO Utility	Aug. 02, 2022	Patents	—	—
—	88. METHOD, SYSTEM AND APPARATUS FOR AUTOMATED REPORTING OF ACCOUNT AND SENSOR ZONE INFORMATION TO A CENTRAL STATION Out Of Place US PAT 11398147 , U.S. PTO Utility	July 26, 2022	Patents	—	—
—	89. SMART LOCK SYSTEMS AND METHODS Out Of Place US PAT 11386730 , U.S. PTO Utility	July 12, 2022	Patents	—	—
—	90. GARAGE DOOR COMMUNICATION SYSTEMS AND METHODS Out Of Place US PAT 11388373 , U.S. PTO Utility	July 12, 2022	Patents	—	—
—	91. AUTOMATION SYSTEM WITH MOBILE INTERFACE Out Of Place US PAT 11378922 , U.S. PTO Utility	July 05, 2022	Patents	—	—
—	92. POWER OUTLET CAMERAS Out Of Place US PAT 11381686+ , U.S. PTO Utility	July 05, 2022	Patents	—	—
—	93. PREMISE MANAGEMENT SYSTEMS AND METHODS Out Of Place US PAT 11367340 , U.S. PTO Utility	June 21, 2022	Patents	—	—
—	94. INTEGRATED CLOUD SYSTEM FOR PREMISES AUTOMATION Out Of Place US PAT 11368327 , U.S. PTO Utility	June 21, 2022	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	95. PREMISES MANAGEMENT CONFIGURATION AND CONTROL <small>Out Of Plan</small> US PAT 11368429 , U.S. PTO Utility	June 21, 2022	Patents	—	—
—	96. DOORBELL PACKAGE DETECTION SYSTEMS AND METHODS <small>Out Of Plan</small> US PAT 11361641 , U.S. PTO Utility	June 14, 2022	Patents	—	—
—	97. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Plan</small> US PAT 11362853+ , U.S. PTO Utility	June 14, 2022	Patents	—	—
—	98. HARDWARE CONFIGURABLE SECURITY, MONITORING AND AUTOMATION CONTROLLER HAVING MODULAR COMMUNICATION PROTOCOL INTERFACES <small>Out Of Plan</small> US PAT 11356926 , U.S. PTO Utility	June 07, 2022	Patents	—	—
—	99. CAPTURING BEHAVIORAL USER INTENT WHEN INTERACTING WITH MULTIPLE ACCESS CONTROLS <small>Out Of Plan</small> US PAT 11341795 , U.S. PTO Utility	May 24, 2022	Patents	—	—
—	100. METHOD AND SYSTEM FOR PROCESSING SECURITY EVENT DATA <small>Out Of Plan</small> US PAT 11341840 , U.S. PTO Utility	May 24, 2022	Patents	—	—

Citing References (100)

Treatment	Title	Date	Type	Depth	Headnote(s)
—	101. PREMISES SYSTEM AUTOMATION <small>Out Of Place</small> US PAT 11343380 , U.S. PTO Utility	May 24, 2022	Patents	—	—
—	102. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11343473 , U.S. PTO Utility	May 24, 2022	Patents	—	—
—	103. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 11316753 , U.S. PTO Utility	Apr. 26, 2022	Patents	—	—
—	104. VIRTUAL DEVICE SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 11316958 , U.S. PTO Utility	Apr. 26, 2022	Patents	—	—
—	105. PREMISES MANAGEMENT CONFIGURATION AND CONTROL <small>Out Of Place</small> US PAT 11310199 , U.S. PTO Utility	Apr. 19, 2022	Patents	—	—
—	106. CAPTURING COMMUNICATION USER INTENT WHEN INTERACTING WITH MULTIPLE ACCESS CONTROLS <small>Out Of Place</small> US PAT 11295563 , U.S. PTO Utility	Apr. 05, 2022	Patents	—	—
—	107. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 11296950 , U.S. PTO Utility	Apr. 05, 2022	Patents	—	—
—	108. SERVER-BASED NOTIFICATION OF ALARM EVENT SUBSEQUENT TO COMMUNICATION FAILURE WITH ARMED SECURITY SYSTEM <small>Out Of Place</small> US PAT 11284331 , U.S. PTO Utility	Mar. 22, 2022	Patents	—	—
—	109. GENERATING RISK PROFILE USING DATA OF HOME MONITORING AND SECURITY SYSTEM <small>Out Of Place</small> US PAT 11277465 , U.S. PTO Utility	Mar. 15, 2022	Patents	—	—
—	110. MOBILE PREMISES AUTOMATION PLATFORM <small>Out Of Place</small> US PAT 11258625 , U.S. PTO Utility	Feb. 22, 2022	Patents	—	—
—	111. CROSS-CLIENT SENSOR USER INTERFACE IN AN INTEGRATED SECURITY NETWORK <small>Out Of Place</small> US PAT 11244545 , U.S. PTO Utility	Feb. 08, 2022	Patents	—	—
—	112. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 11237714 , U.S. PTO Utility	Feb. 01, 2022	Patents	—	—
—	113. DEFINING AND IMPLEMENTING SENSOR TRIGGERED RESPONSE RULES <small>Out Of Place</small> US PAT 11240059 , U.S. PTO Utility	Feb. 01, 2022	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	114. GARAGE DOOR COMMUNICATION SYSTEMS AND METHODS <small>Out Of Plan</small> US PAT 11228739 , U.S. PTO Utility	Jan. 18, 2022	Patents	—	—
—	115. SECURITY, MONITORING AND AUTOMATION CONTROLLER ACCESS AND USE OF LEGACY SECURITY CONTROL PANEL INFORMATION <small>Out Of Plan</small> US PAT 11223998 , U.S. PTO Utility	Jan. 11, 2022	Patents	—	—
—	116. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Plan</small> US PAT 11218878 , U.S. PTO Utility	Jan. 04, 2022	Patents	—	—
—	117. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Plan</small> US PAT 11212192 , U.S. PTO Utility	Dec. 28, 2021	Patents	—	—
—	118. PREMISES SYSTEM MANAGEMENT USING STATUS SIGNAL <small>Out Of Plan</small> US PAT 11201755 , U.S. PTO Utility	Dec. 14, 2021	Patents	—	—
—	119. METHOD AND SYSTEM FOR MANAGING COMMUNICATION CONNECTIVITY <small>Out Of Plan</small> US PAT 11194320 , U.S. PTO Utility	Dec. 07, 2021	Patents	—	—
—	120. INTEGRATED CLOUD SYSTEM WITH LIGHTWEIGHT GATEWAY FOR PREMISES AUTOMATION <small>Out Of Plan</small> US PAT 11190578 , U.S. PTO Utility	Nov. 30, 2021	Patents	—	—
—	121. NETWORKED TOUCHSCREEN WITH INTEGRATED INTERFACES <small>Out Of Plan</small> US PAT 11182060 , U.S. PTO Utility	Nov. 23, 2021	Patents	—	—
—	122. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Plan</small> US PAT 11184322 , U.S. PTO Utility	Nov. 23, 2021	Patents	—	—
—	123. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Plan</small> US PAT 11184589 , U.S. PTO Utility	Nov. 23, 2021	Patents	—	—
—	124. USER INTERFACE IN A PREMISES NETWORK <small>Out Of Plan</small> US PAT 11175793 , U.S. PTO Utility	Nov. 16, 2021	Patents	—	—
—	125. CAPTURING PERSONAL USER INTENT WHEN INTERACTING WITH MULTIPLE ACCESS CONTROLS <small>Out Of Plan</small> US PAT 11164411 , U.S. PTO Utility	Nov. 02, 2021	Patents	—	—
—	126. FORMING A SECURITY NETWORK INCLUDING INTEGRATED SECURITY SYSTEM COMPONENTS AND NETWORK DEVICES <small>Out Of Plan</small> US PAT 11159484 , U.S. PTO Utility	Oct. 26, 2021	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	127. GATEWAY REGISTRY METHODS AND SYSTEMS <small>Out Of Plan</small> US PAT 11153266 , U.S. PTO Utility	Oct. 19, 2021	Patents	—	—
—	128. MEDIA CONTENT MANAGEMENT <small>Out Of Plan</small> US PAT 11146637 , U.S. PTO Utility	Oct. 12, 2021	Patents	—	—
—	129. DOORBELL COMMUNICATION AND ELECTRICAL SYSTEMS <small>Out Of Plan</small> US PAT 11140253 , U.S. PTO Utility	Oct. 05, 2021	Patents	—	—
—	130. DOORBELL COMMUNITIES <small>Out Of Plan</small> US PAT 11132877 , U.S. PTO Utility	Sep. 28, 2021	Patents	—	—
—	131. METHOD AND SYSTEM FOR PROVIDING ALTERNATE NETWORK ACCESS <small>Out Of Plan</small> US PAT 11132888 , U.S. PTO Utility	Sep. 28, 2021	Patents	—	—
—	132. NOTIFICATION OF EVENT SUBSEQUENT TO COMMUNICATION FAILURE WITH SECURITY SYSTEM <small>Out Of Plan</small> US PAT 11129084 , U.S. PTO Utility	Sep. 21, 2021	Patents	—	—
—	133. GATEWAY INTEGRATED WITH PREMISES SECURITY SYSTEM <small>Out Of Plan</small> US PAT 11113950 , U.S. PTO Utility	Sep. 07, 2021	Patents	—	—
—	134. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Plan</small> US PAT 11102027+ , U.S. PTO Utility	Aug. 24, 2021	Patents	—	—
—	135. CONTROLLING DATA ROUTING AMONG NETWORKS <small>Out Of Plan</small> US PAT 11089122 , U.S. PTO Utility	Aug. 10, 2021	Patents	—	—
—	136. PREMISES MANAGEMENT CONFIGURATION AND CONTROL <small>Out Of Plan</small> US PAT 11082395 , U.S. PTO Utility	Aug. 03, 2021	Patents	—	—
—	137. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Plan</small> US PAT 11074790 , U.S. PTO Utility	July 27, 2021	Patents	—	—
—	138. CAPTURING USER INTENT WHEN INTERACTING WITH MULTIPLE ACCESS CONTROLS <small>Out Of Plan</small> US PAT 11043054 , U.S. PTO Utility	June 22, 2021	Patents	—	—
—	139. INTEGRATED SECURITY SYSTEM WITH PARALLEL PROCESSING ARCHITECTURE <small>Out Of Plan</small> US PAT 11043112 , U.S. PTO Utility	June 22, 2021	Patents	—	—
—	140. AUTO-PROVISIONING OF WIRELESS SPEAKER DEVICES FOR AUDIO/VIDEO RECORDING AND COMMUNICATION DEVICES <small>Out Of Plan</small> US PAT 11044554 , U.S. PTO Utility	June 22, 2021	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	141. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 11032242 , U.S. PTO Utility	June 08, 2021	Patents	—	—
—	142. DOORBELL COMMUNITIES <small>Out Of Place</small> US PAT 11004312 , U.S. PTO Utility	May 11, 2021	Patents	—	—
—	143. SYSTEM FOR DATA ROUTING IN NETWORKS <small>Out Of Place</small> US PAT 10999254 , U.S. PTO Utility	May 04, 2021	Patents	—	—
—	144. COMMUNICATION PROTOCOLS OVER INTERNET PROTOCOL (IP) NETWORKS <small>Out Of Place</small> US PAT 10992784 , U.S. PTO Utility	Apr. 27, 2021	Patents	—	—
—	145. PREMISES MANAGEMENT CONFIGURATION AND CONTROL <small>Out Of Place</small> US PAT 10979389 , U.S. PTO Utility	Apr. 13, 2021	Patents	—	—
—	146. INTEGRATED SECURITY SYSTEM WITH PARALLEL PROCESSING ARCHITECTURE <small>Out Of Place</small> US PAT 10942552 , U.S. PTO Utility	Mar. 09, 2021	Patents	—	—
—	147. PREMISE MANAGEMENT SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10930136 , U.S. PTO Utility	Feb. 23, 2021	Patents	—	—
—	148. OUTDOOR SECURITY SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10909825 , U.S. PTO Utility	Feb. 02, 2021	Patents	—	—
—	149. PREMISES MANAGEMENT NETWORKING <small>Out Of Place</small> US PAT 10890881 , U.S. PTO Utility	Jan. 12, 2021	Patents	—	—
—	150. SECURITY SURVEILLANCE DEVICE <small>Out Of Place</small> US PAT 10847004 , U.S. PTO Utility	Nov. 24, 2020	Patents	—	—
—	151. SECURITY SYSTEM WITH NETWORKED TOUCHSCREEN <small>Out Of Place</small> US PAT 10841381 , U.S. PTO Utility	Nov. 17, 2020	Patents	—	—
—	152. METHOD, SYSTEM AND APPARATUS FOR MANAGEMENT OF APPLICATIONS FOR AN SMA CONTROLLER <small>Out Of Place</small> US PAT 10813034 , U.S. PTO Utility	Oct. 20, 2020	Patents	—	—
—	153. AUTOMATION SYSTEM USER INTERFACE WITH THREE-DIMENSIONAL DISPLAY <small>Out Of Place</small> US PAT 10796557 , U.S. PTO Utility	Oct. 06, 2020	Patents	—	—
—	154. WIRELESS COMMUNICATION USB DONGLE <small>Out Of Place</small> US PAT 10783757 , U.S. PTO Utility	Sep. 22, 2020	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	155. FORMING A SECURITY NETWORK INCLUDING INTEGRATED SECURITY SYSTEM COMPONENTS AND NETWORK DEVICES <small>Out Of Place</small> US PAT 10764248 , U.S. PTO Utility	Sep. 01, 2020	Patents	—	—
—	156. AUTOMATION SYSTEM WITH MOBILE INTERFACE <small>Out Of Place</small> US PAT 10754304 , U.S. PTO Utility	Aug. 25, 2020	Patents	—	—
—	157. METHOD AND SYSTEM FOR COMMUNICATING WITH AND CONTROLLING AN ALARM SYSTEM FROM A REMOTE SERVER <small>Out Of Place</small> US PAT 10747216 , U.S. PTO Utility	Aug. 18, 2020	Patents	—	—
—	158. HAPTIC SIGNAL CONVERSION SYSTEM <small>Out Of Place</small> US PAT 10748391 , U.S. PTO Utility	Aug. 18, 2020	Patents	—	—
—	159. METHOD AND SYSTEM FOR PROCESSING SECURITY EVENT DATA <small>Out Of Place</small> US PAT 10741057 , U.S. PTO Utility	Aug. 11, 2020	Patents	—	—
—	160. GARAGE DOOR COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10742938 , U.S. PTO Utility	Aug. 11, 2020	Patents	—	—
—	161. GARAGE DOOR COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10733823 , U.S. PTO Utility	Aug. 04, 2020	Patents	—	—
—	162. MANAGEMENT OF A SECURITY SYSTEM AT A PREMISES <small>Out Of Place</small> US PAT 10735249 , U.S. PTO Utility	Aug. 04, 2020	Patents	—	—
—	163. METHOD FOR NETWORKED TOUCHSCREEN WITH INTEGRATED INTERFACES <small>Out Of Place</small> US PAT 10721087 , U.S. PTO Utility	July 21, 2020	Patents	—	—
—	164. INTERACTIVE DOOR ASSEMBLY SYSTEM AND METHOD <small>Out Of Place</small> US PAT 10721443 , U.S. PTO Utility	July 21, 2020	Patents	—	—
—	165. DOORBELL PACKAGE DETECTION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10706702 , U.S. PTO Utility	July 07, 2020	Patents	—	—
—	166. USER INTERFACE IN A PREMISES NETWORK <small>Out Of Place</small> US PAT 10691295 , U.S. PTO Utility	June 23, 2020	Patents	—	—
—	167. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 10692356 , U.S. PTO Utility	June 23, 2020	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	168. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10687029 , U.S. PTO Utility	June 16, 2020	Patents	—	—
—	169. DOORBELL COMMUNITIES <small>Out Of Place</small> US PAT 10672238 , U.S. PTO Utility	June 02, 2020	Patents	—	—
—	170. METHOD AND SYSTEM FOR PROVIDING ALTERNATE NETWORK ACCESS <small>Out Of Place</small> US PAT 10672254 , U.S. PTO Utility	June 02, 2020	Patents	—	—
—	171. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10674119 , U.S. PTO Utility	June 02, 2020	Patents	—	—
—	172. HARDWARE CONFIGURABLE SECURITY, MONITORING AND AUTOMATION CONTROLLER HAVING MODULAR COMMUNICATION PROTOCOL INTERFACES <small>Out Of Place</small> US PAT 10674428 , U.S. PTO Utility	June 02, 2020	Patents	—	—
—	173. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 10666523 , U.S. PTO Utility	May 26, 2020	Patents	—	—
—	174. SECURITY, MONITORING AND AUTOMATION CONTROLLER ACCESS AND USE OF LEGACY SECURITY CONTROL PANEL INFORMATION <small>Out Of Place</small> US PAT 10657794 , U.S. PTO Utility	May 19, 2020	Patents	—	—
—	175. ENHANCED DOORBELL CAMERA INTERACTIONS <small>Out Of Place</small> US PAT 10635907 , U.S. PTO Utility	Apr. 28, 2020	Patents	—	—
—	176. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 10616075 , U.S. PTO Utility	Apr. 07, 2020	Patents	—	—
—	177. ACTIVATION OF GATEWAY DEVICE <small>Out Of Place</small> US PAT 10616244 , U.S. PTO Utility	Apr. 07, 2020	Patents	—	—
—	178. ENHANCED DOORBELL CAMERA INTERACTIONS <small>Out Of Place</small> US PAT 10586114 , U.S. PTO Utility	Mar. 10, 2020	Patents	—	—
—	179. PREMISES MANAGEMENT SYSTEMS <small>Out Of Place</small> US PAT 10559193 , U.S. PTO Utility	Feb. 11, 2020	Patents	—	—
—	180. INTEGRATED CLOUD SYSTEM WITH LIGHTWEIGHT GATEWAY FOR PREMISES AUTOMATION <small>Out Of Place</small> US PAT 10530839 , U.S. PTO Utility	Jan. 07, 2020	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	181. AUTOMATION SYSTEM USER INTERFACE WITH THREE-DIMENSIONAL DISPLAY <small>Out Of Place</small> US PAT 10522026 , U.S. PTO Utility	Dec. 31, 2019	Patents	—	—
—	182. COMMUNICATION PROTOCOLS OVER INTERNET PROTOCOL (IP) NETWORKS <small>Out Of Place</small> US PAT 10523689 , U.S. PTO Utility	Dec. 31, 2019	Patents	—	—
—	183. SECURITY SURVEILLANCE DEVICE <small>Out Of Place</small> US PAT 10515527 , U.S. PTO Utility	Dec. 24, 2019	Patents	—	—
—	184. WI-FI-TO-SERIAL ENCAPSULATION IN SYSTEMS <small>Out Of Place</small> US PAT 10498830 , U.S. PTO Utility	Dec. 03, 2019	Patents	—	—
—	185. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 10444964 , U.S. PTO Utility	Oct. 15, 2019	Patents	—	—
—	186. PREMISES SYSTEM MANAGEMENT USING STATUS SIGNAL <small>Out Of Place</small> US PAT 10447491 , U.S. PTO Utility	Oct. 15, 2019	Patents	—	—
—	187. DOORBELL COMMUNICATION AND ELECTRICAL SYSTEMS <small>Out Of Place</small> US PAT 10440165 , U.S. PTO Utility	Oct. 08, 2019	Patents	—	—
—	188. DOORBELL COMMUNICATION AND ELECTRICAL SYSTEMS <small>Out Of Place</small> US PAT 10440166 , U.S. PTO Utility	Oct. 08, 2019	Patents	—	—
—	189. DEVICE INTEGRATION FRAMEWORK <small>Out Of Place</small> US PAT 10423309 , U.S. PTO Utility	Sep. 24, 2019	Patents	—	—
—	190. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 10389736 , U.S. PTO Utility	Aug. 20, 2019	Patents	—	—
—	191. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 10380871 , U.S. PTO Utility	Aug. 13, 2019	Patents	—	—
—	192. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Place</small> US PAT 10382452 , U.S. PTO Utility	Aug. 13, 2019	Patents	—	—
—	193. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 10365810 , U.S. PTO Utility	July 30, 2019	Patents	—	—
—	194. CONTROL SYSTEM USER INTERFACE <small>Out Of Place</small> US PAT 10348575 , U.S. PTO Utility	July 09, 2019	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	195. SECURITY NETWORK INTEGRATED WITH PREMISE SECURITY SYSTEM <small>Out Of Plan</small> US PAT 10339791 , U.S. PTO Utility	July 02, 2019	Patents	—	—
—	196. CONTROLLER AND INTERFACE FOR HOME SECURITY, MONITORING AND AUTOMATION HAVING CUSTOMIZABLE AUDIO ALERTS FOR SMA EVENTS <small>Out Of Plan</small> US PAT 10332363 , U.S. PTO Utility	June 25, 2019	Patents	—	—
—	197. FORMING A SECURITY NETWORK INCLUDING INTEGRATED SECURITY SYSTEM COMPONENTS AND NETWORK DEVICES <small>Out Of Plan</small> US PAT 10313303 , U.S. PTO Utility	June 04, 2019	Patents	—	—
—	198. SERVER-BASED NOTIFICATION OF ALARM EVENT SUBSEQUENT TO COMMUNICATION FAILURE WITH ARMED SECURITY SYSTEM <small>Out Of Plan</small> US PAT 10275999 , U.S. PTO Utility	Apr. 30, 2019	Patents	—	—
—	199. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Plan</small> US PAT 10277609 , U.S. PTO Utility	Apr. 30, 2019	Patents	—	—
—	200. COMMUNICATION PROTOCOLS IN INTEGRATED SYSTEMS <small>Out Of Plan</small> US PAT 10237237 , U.S. PTO Utility	Mar. 19, 2019	Patents	—	—

Citing References (100)

Treatment	Title	Date	Type	Depth	Headnote(s)
—	201. METHODS AND SYSTEMS FOR IMPROVED SYSTEM PERFORMANCE <small>Out Of Place</small> US PAT 10225314 , U.S. PTO Utility	Mar. 05, 2019	Patents	—	—
—	202. LIGHT SOCKET CAMERAS <small>Out Of Place</small> US PAT 10218932 , U.S. PTO Utility	Feb. 26, 2019	Patents	—	—
—	203. FORMING A SECURITY NETWORK INCLUDING INTEGRATED SECURITY SYSTEM COMPONENTS AND NETWORK DEVICES <small>Out Of Place</small> US PAT 10212128 , U.S. PTO Utility	Feb. 19, 2019	Patents	—	—
—	204. SMART LOCK SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10204467 , U.S. PTO Utility	Feb. 12, 2019	Patents	—	—
—	205. COMMUNICATION PROTOCOLS OVER INTERNET PROTOCOL (IP) NETWORKS <small>Out Of Place</small> US PAT 10200504 , U.S. PTO Utility	Feb. 05, 2019	Patents	—	—
—	206. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 10200660 , U.S. PTO Utility	Feb. 05, 2019	Patents	—	—
—	207. METHOD AND SYSTEM FOR PROVIDING ALTERNATE NETWORK ACCESS <small>Out Of Place</small> US PAT 10140840 , U.S. PTO Utility	Nov. 27, 2018	Patents	—	—
—	208. METHODS AND SYSTEMS FOR IMPROVED SYSTEM PERFORMANCE <small>Out Of Place</small> US PAT 10142392 , U.S. PTO Utility	Nov. 27, 2018	Patents	—	—
—	209. GENERATING RISK PROFILE USING DATA OF HOME MONITORING AND SECURITY SYSTEM <small>Out Of Place</small> US PAT 10142394 , U.S. PTO Utility	Nov. 27, 2018	Patents	—	—
—	210. DOORBELL CAMERA EARLY DETECTION <small>Out Of Place</small> US PAT 10133935 , U.S. PTO Utility	Nov. 20, 2018	Patents	—	—
—	211. PORTABLE SECURITY SURVEILLANCE DEVICE <small>Out Of Place</small> US PAT 10115276 , U.S. PTO Utility	Oct. 30, 2018	Patents	—	—
—	212. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 10097796 , U.S. PTO Utility	Oct. 09, 2018	Patents	—	—
—	213. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 10097797 , U.S. PTO Utility	Oct. 09, 2018	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	214. DOORBELL PACKAGE DETECTION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10043332 , U.S. PTO Utility	Aug. 07, 2018	Patents	—	—
—	215. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 10044519 , U.S. PTO Utility	Aug. 07, 2018	Patents	—	—
—	216. POWER OUTLET CAMERAS <small>Out Of Place</small> US PAT 9997036+ , U.S. PTO Utility	June 12, 2018	Patents	—	—
—	217. DOORBELL <small>Out Of Place</small> US PAT D817208 , U.S. PTO Design	May 08, 2018	Patents	—	—
—	218. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 9924141 , U.S. PTO Utility	Mar. 20, 2018	Patents	—	—
—	219. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9888216 , U.S. PTO Utility	Feb. 06, 2018	Patents	—	—
—	220. SYSTEM AND METHOD OF INTERACTING WITH HOME AUTOMATION SYSTEMS VIA A SET-TOP BOX DEVICE <small>Out Of Place</small> US PAT 9872064 , U.S. PTO Utility	Jan. 16, 2018	Patents	—	—
—	221. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 9866802 , U.S. PTO Utility	Jan. 09, 2018	Patents	—	—
—	222. DOORBELL PACKAGE DETECTION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9799183 , U.S. PTO Utility	Oct. 24, 2017	Patents	—	—
—	223. DOORBELL CHIME SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9786133 , U.S. PTO Utility	Oct. 10, 2017	Patents	—	—
—	224. MONITORING SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9769435 , U.S. PTO Utility	Sep. 19, 2017	Patents	—	—
—	 225. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9743049 , U.S. PTO Utility	Aug. 22, 2017	Patents	—	—
—	226. DOORBELL COMMUNICATION AND ELECTRICAL SYSTEMS <small>Out Of Place</small> US PAT 9736284 , U.S. PTO Utility	Aug. 15, 2017	Patents	—	—
—	227. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 9706178 , U.S. PTO Utility	July 11, 2017	Patents	—	—
—	228. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Place</small> US PAT 9648290 , U.S. PTO Utility	May 09, 2017	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	229. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Phase</small> US PAT 9635323 , U.S. PTO Utility	Apr. 25, 2017	Patents	—	—
—	230. WIRELESS ENTRANCE COMMUNICATION DEVICE <small>Out Of Phase</small> US PAT 9584775 , U.S. PTO Utility	Feb. 28, 2017	Patents	—	—
—	231. PORTABLE SECURITY SURVEILLANCE DEVICE <small>Out Of Phase</small> US PAT 9578261 , U.S. PTO Utility	Feb. 21, 2017	Patents	—	—
—	232. SYSTEM AND METHOD OF INTERACTING WITH HOME AUTOMATION SYSTEMS VIA A SET-TOP BOX DEVICE <small>Out Of Phase</small> US PAT 9571884 , U.S. PTO Utility	Feb. 14, 2017	Patents	—	—
—	233. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Phase</small> US PAT 9554090 , U.S. PTO Utility	Jan. 24, 2017	Patents	—	—
—	234. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Phase</small> US PAT 9516284 , U.S. PTO Utility	Dec. 06, 2016	Patents	—	—
—	235. DOORBELL PACKAGE DETECTION SYSTEMS AND METHODS <small>Out Of Phase</small> US PAT 9508239 , U.S. PTO Utility	Nov. 29, 2016	Patents	—	—
—	236. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Phase</small> US PAT 9485478 , U.S. PTO Utility	Nov. 01, 2016	Patents	—	—
—	237. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Phase</small> US PAT 9432638 , U.S. PTO Utility	Aug. 30, 2016	Patents	—	—
—	238. COMMUNICATION AND MONITORING SYSTEM <small>Out Of Phase</small> US PAT 9414030 , U.S. PTO Utility	Aug. 09, 2016	Patents	—	—
—	239. DISPLAY SCREEN OR A PORTION THEREOF WITH A GRAPHICAL USER INTERFACE <small>Out Of Phase</small> US PAT D762688 , U.S. PTO Design	Aug. 02, 2016	Patents	—	—
—	240. SMART LOCK SYSTEMS AND METHODS <small>Out Of Phase</small> US PAT 9342936 , U.S. PTO Utility	May 17, 2016	Patents	—	—
—	241. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Phase</small> US PAT 9253455+ , U.S. PTO Utility	Feb. 02, 2016	Patents	—	—
—	242. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Phase</small> US PAT 9247219+ , U.S. PTO Utility	Jan. 26, 2016	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	243. DISPLAY SCREEN OR PORTION THEREOF WITH A GRAPHICAL USER INTERFACE Out Of Place US PAT D747732 , U.S. PTO Design	Jan. 19, 2016	Patents	—	—
—	244. DISPLAY SCREEN OR PORTION THEREOF WITH A GRAPHICAL USER INTERFACE Out Of Place US PAT D747733 , U.S. PTO Design	Jan. 19, 2016	Patents	—	—
—	245. REMOTE IDENTITY VERIFICATION OF LODGING GUESTS Out Of Place US PAT 9235943 , U.S. PTO Utility	Jan. 12, 2016	Patents	—	—
—	246. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of Place US PAT 9237318+ , U.S. PTO Utility	Jan. 12, 2016	Patents	—	—
—	247. DOORBELL COMMUNITIES Out Of Place US PAT 9230424 , U.S. PTO Utility	Jan. 05, 2016	Patents	—	—
—	248. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of Place US PAT 9196133+ , U.S. PTO Utility	Nov. 24, 2015	Patents	—	—
—	249. IDENTITY VERIFICATION USING A SOCIAL NETWORK Out Of Place US PAT 9197867 , U.S. PTO Utility	Nov. 24, 2015	Patents	—	—
—	250. DOORBELL CHIME SYSTEMS AND METHODS Out Of Place US PAT 9179107+ , U.S. PTO Utility	Nov. 03, 2015	Patents	—	—
—	251. DOORBELL CHIME SYSTEMS AND METHODS Out Of Place US PAT 9179108+ , U.S. PTO Utility	Nov. 03, 2015	Patents	—	—
—	 252. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of Place US PAT 9179109 , U.S. PTO Utility	Nov. 03, 2015	Patents	—	—
—	253. DOORBELL DIAGNOSTICS Out Of Place US PAT 9172920 , U.S. PTO Utility	Oct. 27, 2015	Patents	—	—
—	254. DOORBELL ANTENNA Out Of Place US PAT 9172921 , U.S. PTO Utility	Oct. 27, 2015	Patents	—	—
—	255. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of Place US PAT 9172922 , U.S. PTO Utility	Oct. 27, 2015	Patents	—	—
—	256. LIGHT SOCKET CAMERAS Out Of Place US PAT 9165444 , U.S. PTO Utility	Oct. 20, 2015	Patents	—	—
—	 257. DOORBELL CHIME SYSTEMS AND METHODS Out Of Place US PAT 9160987+ , U.S. PTO Utility	Oct. 13, 2015	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	258. LIGHT SOCKET CAMERAS <small>Out Of Place</small> US PAT 9142214 , U.S. PTO Utility	Sep. 22, 2015	Patents	—	—
—	259. DISPLAY SCREEN OR PORTION THEREOF WITH A GRAPHICAL USER INTERFACE <small>Out Of Place</small> US PAT D737283 , U.S. PTO Design	Aug. 25, 2015	Patents	—	—
—	260. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9118819+ , U.S. PTO Utility	Aug. 25, 2015	Patents	—	—
—	261. SMART LOCK SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9109378 , U.S. PTO Utility	Aug. 18, 2015	Patents	—	—
—	262. POWER OUTLET CAMERAS <small>Out Of Place</small> US PAT 9113051+ , U.S. PTO Utility	Aug. 18, 2015	Patents	—	—
—	263. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9113052+ , U.S. PTO Utility	Aug. 18, 2015	Patents	—	—
—	264. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9094584+ , U.S. PTO Utility	July 28, 2015	Patents	—	—
—	265. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9065987+ , U.S. PTO Utility	June 23, 2015	Patents	—	—
—	266. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9058738+ , U.S. PTO Utility	June 16, 2015	Patents	—	—
—	267. DOORBELL SECURITY AND SAFETY <small>Out Of Place</small> US PAT 9060103 , U.S. PTO Utility	June 16, 2015	Patents	—	—
—	268. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9060104+ , U.S. PTO Utility	June 16, 2015	Patents	—	—
—	269. LIGHT SOCKET CAMERAS <small>Out Of Place</small> US PAT 9053622 , U.S. PTO Utility	June 09, 2015	Patents	—	—
—	270. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9055202 , U.S. PTO Utility	June 09, 2015	Patents	—	—
—	271. POOL MONITOR SYSTEMS AND METHODS <small>Out Of Place</small> US PAT 9049352 , U.S. PTO Utility	June 02, 2015	Patents	—	—
—	272. DOORBELL <small>Out Of Place</small> US PAT D729678 , U.S. PTO Design	May 19, 2015	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	273. DOORBELL <small>Out Of Page</small> US PAT D727769 , U.S. PTO Design	Apr. 28, 2015	Patents	—	—
—	274. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 9013575 , U.S. PTO Utility	Apr. 21, 2015	Patents	—	—
—	275. DOORBELL COMMUNICATION AND ELECTRICAL SYSTEMS <small>Out Of Page</small> US PAT 8953040 , U.S. PTO Utility	Feb. 10, 2015	Patents	—	—
—	276. SMART LOCK SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 8947530 , U.S. PTO Utility	Feb. 03, 2015	Patents	—	—
—	277. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 8941736 , U.S. PTO Utility	Jan. 27, 2015	Patents	—	—
—	278. DOORBELL COMMUNICATION AND ELECTRICAL METHODS <small>Out Of Page</small> US PAT 8937659 , U.S. PTO Utility	Jan. 20, 2015	Patents	—	—
—	279. METHOD AND SYSTEM FOR INTERACTIVE HOME MONITORING <small>Out Of Page</small> US PAT 8923919 , U.S. PTO Utility	Dec. 30, 2014	Patents	—	—
—	280. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 8872915+ , U.S. PTO Utility	Oct. 28, 2014	Patents	—	—
—	281. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 8842180+ , U.S. PTO Utility	Sep. 23, 2014	Patents	—	—
—	282. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 8823795+ , U.S. PTO Utility	Sep. 02, 2014	Patents	—	—
—	283. DOORBELL <small>Out Of Page</small> US PAT D711275 , U.S. PTO Design	Aug. 19, 2014	Patents	—	—
—	284. ELECTRONIC DEVICE <small>Out Of Page</small> US PAT D710727 , U.S. PTO Design	Aug. 12, 2014	Patents	—	—
—	285. ELECTRONIC DEVICE <small>Out Of Page</small> US PAT D710728 , U.S. PTO Design	Aug. 12, 2014	Patents	—	—
—	286. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Page</small> US PAT 8780201+ , U.S. PTO Utility	July 15, 2014	Patents	—	—
—	287. METHOD AND SYSTEM FOR INTERACTIVE HOME MONITORING <small>Out Of Page</small> US PAT 8744523 , U.S. PTO Utility	June 03, 2014	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	288. ALARM SYSTEMS HAVING MULTIPLE COMMUNICATION ALTERNATIVES FOR CONTACTING A MONITORING SERVICE AND METHODS OF OPERATING THE SAME Out Of File US PAT 8676152 , U.S. PTO Utility	Mar. 18, 2014	Patents	—	—
—	289. SYSTEM AND METHOD OF INTERACTING WITH HOME AUTOMATION SYSTEMS VIA A SET-TOP BOX DEVICE Out Of File US PAT 8413204 , U.S. PTO Utility	Apr. 02, 2013	Patents	—	—
—	 290. COMMUNICATION AND MONITORING SYSTEM Out Of File US PAT 8164614 , U.S. PTO Utility	Apr. 24, 2012	Patents	—	—
—	 291. AUDIO-VIDEO COMMUNICATION SYSTEM FOR RECEIVING PERSON AT ENTRANCE Out Of File US PAT 8154581 , U.S. PTO Utility	Apr. 10, 2012	Patents	—	—
—	 292. TWO-WAY AUDIO-VIDEO COMMUNICATION METHOD FOR RECEIVING PERSON AT ENTRANCE Out Of File US PAT 8144183 , U.S. PTO Utility	Mar. 27, 2012	Patents	—	—
—	 293. DETECTION AND VIEWING SYSTEM Out Of File US PAT 8144184 , U.S. PTO Utility	Mar. 27, 2012	Patents	—	—
—	 294. VIDEO COMMUNICATION METHOD FOR RECEIVING PERSON AT ENTRANCE Out Of File US PAT 8139098 , U.S. PTO Utility	Mar. 20, 2012	Patents	—	—
—	295. MONITORING AND NOTIFICATION APPARATUS Out Of File US PAT 7671737 , U.S. PTO Utility	Mar. 02, 2010	Patents	—	—
—	296. POWER OUTLET CAMERAS Out Of File US PAT APP 20240163130 , U.S. PTO Application	May 16, 2024	Patents	—	—
—	297. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of File US PAT APP 20240154838 , U.S. PTO Application	May 09, 2024	Patents	—	—
—	298. DOORBELL COMMUNICATIONS SYSTEMS AND METHODS Out Of File US PAT APP 20240007321 , U.S. PTO Application	Jan. 04, 2024	Patents	—	—
—	299. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of File US PAT APP 20230306825 , U.S. PTO Application	Sep. 28, 2023	Patents	—	—
—	300. DOORBELL COMMUNICATION SYSTEMS AND METHODS Out Of File US PAT APP 20230090745 , U.S. PTO Application	Mar. 23, 2023	Patents	—	—

Citing References (32)

Treatment	Title	Date	Type	Depth	Headnote(s)
—	301. POWER OUTLET CAMERAS <small>Out Of Place</small> US PAT APP 20220407965 , U.S. PTO Application	Dec. 22, 2022	Patents	—	—
—	302. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20220392317+ , U.S. PTO Application	Dec. 08, 2022	Patents	—	—
—	303. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20220368556 , U.S. PTO Application	Nov. 17, 2022	Patents	—	—
—	304. DOORBELL COMMUNICATIONS SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20220353107 , U.S. PTO Application	Nov. 03, 2022	Patents	—	—
—	305. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20220319285 , U.S. PTO Application	Oct. 06, 2022	Patents	—	—
—	306. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20210385104 , U.S. PTO Application	Dec. 09, 2021	Patents	—	—
—	307. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20210194718 , U.S. PTO Application	June 24, 2021	Patents	—	—
—	308. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20200382333 , U.S. PTO Application	Dec. 03, 2020	Patents	—	—
—	309. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20200364991+ , U.S. PTO Application	Nov. 19, 2020	Patents	—	—
—	310. POWER OUTLET CAMERAS <small>Out Of Place</small> US PAT APP 20200358908 , U.S. PTO Application	Nov. 12, 2020	Patents	—	—
—	311. DOORBELL COMMUNICATIONS SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20200336329 , U.S. PTO Application	Oct. 22, 2020	Patents	—	—
—	312. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20200082679 , U.S. PTO Application	Mar. 12, 2020	Patents	—	—
—	313. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20180343142 , U.S. PTO Application	Nov. 29, 2018	Patents	—	—
—	314. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20170373876 , U.S. PTO Application	Dec. 28, 2017	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	315. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20170373877 , U.S. PTO Application	Dec. 28, 2017	Patents	—	—
—	316. POWER OUTLET CAMERAS <small>Out Of Place</small> US PAT APP 20170280109 , U.S. PTO Application	Sep. 28, 2017	Patents	—	—
—	317. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20170084132+ , U.S. PTO Application	Mar. 23, 2017	Patents	—	—
—	318. POWER OUTLET CAMERAS <small>Out Of Place</small> US PAT APP 20170048495 , U.S. PTO Application	Feb. 16, 2017	Patents	—	—
—	319. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150341603 , U.S. PTO Application	Nov. 26, 2015	Patents	—	—
—	320. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150319411 , U.S. PTO Application	Nov. 05, 2015	Patents	—	—
—	321. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150228167 , U.S. PTO Application	Aug. 13, 2015	Patents	—	—
—	322. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150145993 , U.S. PTO Application	May 28, 2015	Patents	—	—
—	323. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150116490 , U.S. PTO Application	Apr. 30, 2015	Patents	—	—
—	324. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150049191 , U.S. PTO Application	Feb. 19, 2015	Patents	—	—
—	325. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of Place</small> US PAT APP 20150029335 , U.S. PTO Application	Jan. 29, 2015	Patents	—	—
—	326. Doorbell communication systems and methods <small>Out Of Place</small> AU PAT APP 2014293304 A1	Feb. 04, 2016	Patents	—	—
—	327. Doorbell communication systems and methods <small>Out Of Place</small> AU PAT APP 2014312083 A1	Feb. 04, 2016	Patents	—	—
—	328. Door bell communication system and method <small>Out Of Place</small> CN PAT APP 105684407 A (HUM)	June 15, 2016	Patents	—	—
—	329. Door bell communication system and method <small>Out Of Place</small> CN PAT APP 105612564 A (HUM)	May 25, 2016	Patents	—	—

Treatment	Title	Date	Type	Depth	Headnote(s)
—	330. DOORBELL COMMUNICATION SYSTEM <small>Out Of File</small> EP PAT APP 3889925 A1	Oct. 06, 2021	Patents	—	—
—	331. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of File</small> EP PAT APP 3039659 A1	July 06, 2016	Patents	—	—
—	332. DOORBELL COMMUNICATION SYSTEMS AND METHODS <small>Out Of File</small> EP PAT APP 3025314 A1	June 01, 2016	Patents	—	—

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US11559808 [🔗](#) ([\(/api/control?client=&query=PRN:\(\"US11559808\"\)&autosearch=true\)](https://api/control?client=&query=PRN:(\))

2006-11-14

Ultimate owner

ZINSER DUKE W [🔗](#) ([\(/api/control?client=&query=uoi:\(\"ZINSER%20DUKE%20W\"\)&autosearch=true\)](https://api/control?client=&query=uoi:(\))

Original assignee

ZINSER DUKE W [🔗](#) ([\(/api/control?client=&query=pa:\(\"ZINSER%20DUKE%20W\"\)&autosearch=true\)](https://api/control?client=&query=pa:(\))

Current assignee

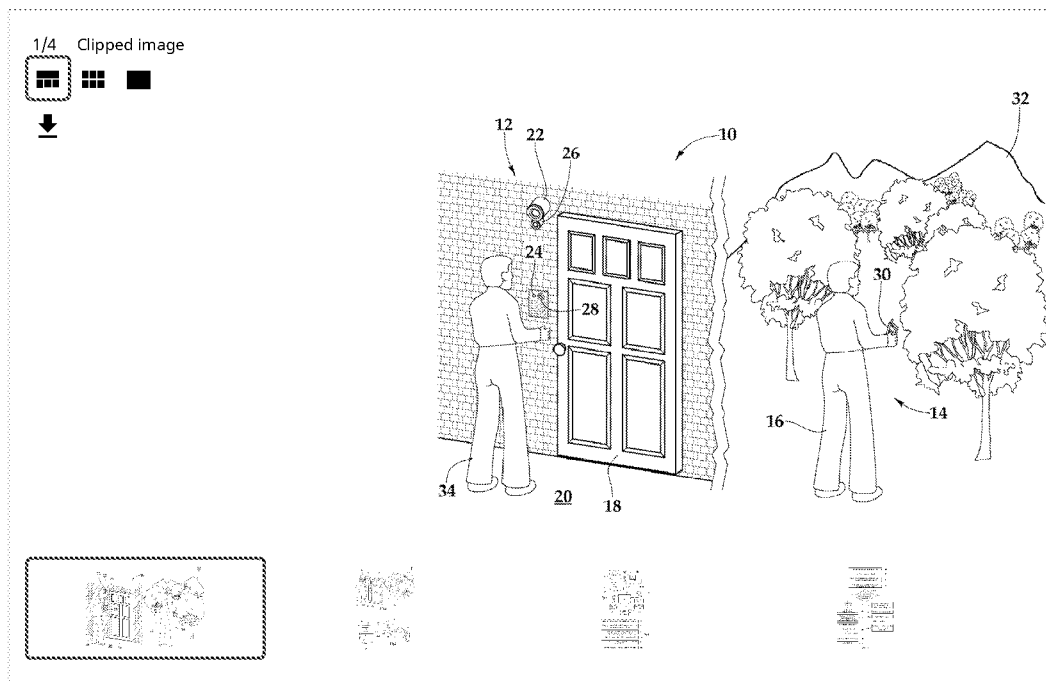
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Abstract

□ A security system and method for use of the same are disclosed that provide for remote surveillance. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point.

Original

Claims

□ 1. A doorbell monitoring system comprising: a doorway having an environment; a doorbell located in the doorway, the ringing of the doorbell being a triggering event; a video camera and an external microphone disposed in the entry point, the video camera and external microphone, responsive to the triggering event, for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications; an external speaker disposed in the entry point, the external speaker for rendering received cellular audio communications; a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone,

transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.

2. The system as recited in claim 1 , wherein the video camera and the external microphone are integrated.

3. The system as recited in claim 1 , wherein the external microphone and speaker are integrated.

4. The system as recited in claim 1 , wherein the control unit is disposed in communication with the video camera and the external microphone by a communication link selected from the group consisting of wireless links and physical links.

5. The system as recited in claim 1 , wherein the at least one portion of the entry point visual and audio communications comprises data selected from the group consisting of audio data, at least one image and audio data, and streaming visual and audio data.

6. The system as recited in claim 1 , wherein the cellular telephone comprises teleconferencing functionality.

7. The system as recited in claim 1 , wherein the connection between the control unit and cellular telephone comprises a network connection over a cellular network.

8. A method for providing doorbell monitoring, the method comprising: ringing of a doorbell at an entry point; responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point; relaying at least a portion of the captured visual and audio communications to a cellular phone; rendering the least a portion of the captured visual and audio communications at the cellular phone; capturing audio communications at the cellular phone; relaying the audio communications from the cellular phone to the entry point; and rendering the audio communications at the entry point.

9. The method as recited in claim 8 , wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone occur substantially simultaneously.

10. The method as recited in claim 8 , wherein the operation of relaying at least a portion of the captured visual and audio communications and the operation of relaying the audio communications for the cellular phone generate duplexed audio communication.

11. The method as recited in claim 8 , further comprising forwarding the captured visual and audio communications to a data storage device located onsite to the entry point.

12. The method as recited in claim 8 , further comprising forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

13. The method as recited in claim 8 , further comprising enabling the captured visual and audio communications with the cellular phone using a network selected from the group consisting of a Public Switched Telephone Network (PSTN), a satellite-based network, and the Internet.

14. A doorbell monitoring system comprising: a doorbell located at an entry point; means, responsive to the ringing of the doorbell, for capturing visual and audio communications at the entry point; means for relaying at least a portion of the captured visual and audio communications to a cellular phone; means for rendering the least a portion of the captured visual and audio communications at the cellular phone; means for capturing audio communications at the cellular phone; means for relaying the audio communications from the cellular phone to the entry point; and means for rendering the audio communications at the entry point.

15. The system as recited in claim 14 , wherein the means for relaying at least a portion of the captured visual and audio communications and means for relaying the audio communications for the cellular phone operate substantially simultaneously.

16. The system as recited in claim 14 , wherein the means for relaying at least a portion of the captured visual and audio communications and the means for relaying the audio communications for the cellular phone operate to provide duplexed audio communication.

17. The system as recited in claim 14 , further comprising means for forwarding the captured visual and audio communications to means for data storage located onsite to the entry point.

18. The system as recited in claim 14 , further comprising means for forwarding the captured visual and audio communications to a video monitor located onsite to the entry point.

19. A system for providing doorbell monitoring, the system comprising: a doorway to a home having an environment; a doorway located in the doorway, the ringing of the doorbell being a triggering event; a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications; a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway; an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications; a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.

20. The system as recited in claim 19 , wherein the home comprises a structure selected from the group consisting of a house, an apartment, a loft, a condominium, and a townhouse.

Original

Families

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This section contains all family relations of this particular document. For more information about the different families, refer to the User Manual (Glossary/Families).

Extended (2) Priority date/claims	Complete (2) Priority date/claims	Main (2) Priority date/claims	Domestic (2) Priority date/claims	☐ Publication number	Application number	Title	Status	
2006-11-14 US11559808	2006-11-14 US11559808	2006-11-14 US11559808	2006-11-14	☐ US7583191B2	US11559808	Security system and method for use of same	Granted	
				☐ US20080111684A1	US11559808	Security System and Method for Use of Same	Granted	

Description



[0001] This invention relates, in general, to security systems and, in particular, to a security system and accompanying method for use of the same for providing remote surveillance and communication with a doorway or other point of entry.

BACKGROUND OF THE INVENTION

[0002] Security systems are typically used to monitor alarms and connect an onsite control unit to a predetermined third party. For example, security systems may utilize a direct phone wire (or tamper-resistant fiber optic cable) to connect the control unit to a third party security monitoring service or, in some high end systems, to a first responder via. Onsite speaker phones allow for the third party to speak with the intruder. In the instance of an actual break-in, the speaker phone may be used to sound an alarm or to allow a person to urge the intruder to cease and desist as response units have been dispatched. These existing security systems are reactive, however, and a need exists for a security system that provides a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

SUMMARY OF THE INVENTION

[0003] A security system and method for use of the same are disclosed that provide for remote surveillance of an entry way of a property in order to deter potential burglars and other unwanted individuals. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone, respectively, to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point. The systems and methods presented herein thereby provide a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] For a more complete understanding of the features and advantages of the present invention, reference is now made to the detailed description of the invention along with the accompanying figures in which corresponding numerals in the different figures refer to corresponding parts and in which:

[0005] FIG. 1 is a perspective illustration of an entry point equipped with one embodiment of the security system described herein and a remote location wherein an individual is utilizing the security system to monitor the entry point;

[0006] FIG. 2 is a functional block diagram of one embodiment of the security system;

[0007] FIG. 3 is a functional block diagram of one embodiment of communication and control units which form portions of the security system;

[0008] FIG. 4 is a flow chart depicting one embodiment of a method for providing security; and

[0009] FIG. 5 is a flow chart depicting another embodiment of a method for providing security.

DETAILED DESCRIPTION OF THE INVENTION

[0010] While the making and using of various embodiments of the present invention are discussed in detail below, it should be appreciated that the present invention provides many applicable inventive concepts which can be embodied in a wide variety of specific contexts. The specific embodiments discussed herein are merely illustrative of specific ways to make and use the invention, and do not delimit the scope of the present invention.

[0011] Referring initially to FIG. 1, therein is depicted an illustration of one embodiment of the security system **10** described herein being utilized at an entry point **12**. Further, a remote location **14** is depicted wherein an individual **16** is utilizing the security system **10** to monitor the entry point **12** which includes a doorway **18** to a home having an environment **20**. It should be appreciated that the security system **10** described herein may be utilized with any type of structure and entry point **12**. In particular, the security system **10** presented herein is well suited for doorways at houses, apartments, lofts, condominiums, and townhouses, for example.

[0012] A video camera **22** and an external microphone **24** are disposed in the doorway **18**. A proximity detector **26** and an external speaker **28** are also disposed in the doorway **18**. A cellular telephone **30** is disposed in the possession of the homeowner **16** who is away from the home in a park **32**. It should be appreciated, however, that any homeowner location is within the teachings of the present invention. For example, the homeowner **16** may be in the backyard of the home or in a remote site such as an office. Moreover, the teachings presented herein apply to persons, such as family members, security personal, or friends, for example, other than the homeowner **16** that are monitoring or assisting with the monitoring of the home.

[0013] In operation, an individual **34** approaches the doorway **18** and the proximity detector **26** is actuated. In turn, the video camera **22** and external microphone **24** capture visual and audio communications at the doorway **18**. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone **30** of the homeowner **16** via a control unit that is in communication with the video camera **22**, external microphone **24**, proximity detector **26**, and exterior speaker **28** as well as a cellular network for communicating with the cellular telephone **30**.

[0014] Similarly, the control unit relays captured cellular audio communications from the homeowner **16** to the external speaker **28**. In this manner, the homeowner is permitted to monitor the home in substantially realtime while away and, further, the homeowner **16** and individual **34** are able to communicate as if the homeowner **14** was at home. In particular, the individual **34** will be believe that the homeowner **16** is home.

[0015] Accordingly, the security system **10** and accompanying method presented herein permit the homeowner **16** or designated entity or individual, who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed. The visitor (or perpetrator) can hear the homeowner's voice but cannot see the homeowner, since the video is communicated one-way from the doorway **18** to the cellular telephone **30** of the homeowner **16**. In application, an honest visitor with good intentions will assume that the homeowner **16** is on premises. Similarly, a perpetrator will assume that the homeowner **16** is at home and the perpetrator can be expected to move on if his motives are unlawful.

[0016] Further, in another embodiment, the security system **10** includes a plurality of video cameras **22** positioned around the perimeter of the property. The video cameras **22** may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner **16**; however, the plurality of video cameras **22** collect video for the homeowner's review irrespective of the occurrence of the triggering event.

[0017] FIG. 2 depicts one embodiment of the security system **10**. A control unit portion **40**, or control unit **40**, controls a communication portion **42** and relays data and communications between the communication portion **42** and the cellular telephone **30** via a cellular network **44**. As illustrated, the communication portion **42** includes the video camera **22**, the exterior microphone **24**, the exterior speaker **28** and a doorbell **29**, which may included as part of the communication portion **42** in particular embodiments. Preferably, the control unit **40** is located onsite with the components of the communication portion **42** and each of the components of the communication portion **42** may be connected to the control unit portion by a wired connection, such as a conventional circuit board or internal computer connection, a Category 5 (CAT 5) cable, or coaxial cable, for example, a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology, for example, or some combination thereof.

[0018] The cellular telephone network or cellular network **44** is employed to relay visual and audio data from the control unit to the cellular telephone **30** and relay audio data and control signals from the cellular telephone **30** to the control unit **40**. Several cellular telephone systems are available to provide the communication exchanges. By way of non-limiting examples, an exemplary list of cellular telephone systems is presented in Table 1.

[0019]

TABLE 1

Cellular Telephone System	Generation	Channel Spacing	Access Method
CDMAONE	2 G	1.25 MHZ	CDMA
CDMA2000 1x	2.5 G	1.25 MHZ	CDMA
CDMA2000 1xEV-DO	3 G	1.25 MHZ	CDMA
CDMA2000 1xEV-DV	3 G	1.25 MHZ	CDMA
UMTS	3 G	5 MHZ	CDMA/TDMA
TD-SCDMA	3 G	1.6 MHZ	CDMA

[0020] Before continuing with the discussion of FIG. 2 in paragraph 24, the cellular telephone systems of Table 1 will be briefly discussed. The CDMAONE cellular telephone system is the brand name for the standard reference IS95, which was the first CDMA system to gain widespread use. The initial specification for the system was IS95A, but its performance has since been upgraded under IS95B. Apart from voice, the CDMA cellular telephone system carries data at rates up to 14.4 kbps for IS95A and up to 115 kbps for IS95B.

[0021] The CDMA2000 1x cellular telephone system supports both voice and data capabilities within a standard 1.25 MHZ CDMA channel. This system doubles the voice capacity of CDMAONE systems and also supports high-speed data services. Rates of 153 kbps are currently available and greater data transfer rates are planned.

[0022] The CDMA2000 1xEV-DO or Evolution Data Only standard builds on the CDMA2000 standard and provides peak data rate capability of over 2.45 Mbps on a downlink, i.e., from the base station to the user. The CDMA2000 1xEV-DV or Evolution Data and Voice cellular telephone system can simultaneously transmit voice and data with a peak data rate of 3.1 Mbps on the forward link or downlink and 384 kbps on the reverse link.

[0023] The UMTS (Universal Mobile Telecommunications System) utilizes Wideband CDMA with one 5 MHZ wide channel for both voice and data that provides speeds of up to 2 Mbps. The Time Division Synchronous CDMA or TD-SCDMA cellular telephone system, which is not popular in the United States, utilizes different time slots for base states and mobiles to communicate. It should be appreciated that the security system presented herein is not limited to any one particular cellular telephone system and systems not presented herein are within the teachings of the present invention. Additionally, the cellular telephone networks discussed herein may include systems which utilize the public switched telephone network (PSTN), satellite-based networks, and other systems known in the art.

[0024] Also, the cellular telephone networks described herein may include or employ the Internet, and associated protocols, which can be utilized by some models of cellular telephones to receive images as well as audio and visual data. In the instances when data is transferred to or from the cellular telephone via the Internet, the cellular network 44 may include onsite (or home) or offsite servers that are setup by a security company or the homeowner to facilitate the transfer of the data.

[0025] The cellular telephone 30 may comprise any long-range, portable electronic device that provides for peer-to-peer telecommunications over a long distance. The cellular telephone 30 may comprise a personal digital assistant (PDA) or other electronic communication device. As illustrated, the cellular telephone 30 receives signals 46 and sends signals 48. The signals 46 from the control unit 40 to the cellular telephone 30 may include voice, images, and video signals. The signals 48 to the control unit 40 may comprise voice and control signals. In addition to the voice function of the cellular telephone 30, the image, video, and data services of the cellular phone may be provided by a short message service (SMS) which utilizes text messaging, email, packet switching for access to the Internet to provide the content. Other suitable services for providing the content needed by the cellular telephone 30 include a multimedia message service (MMS) for sending and receiving photos and video. It should be appreciated, however, that the data and content received by the cellular telephone 30 is not limited to these services.

[0026] In an alternate embodiment, the video camera 22 may be integrated into the doorbell 29 and the integrated components disposed in communication with the control unit portion 40 such that the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30. The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification and it may take the form of a page, email, text message, instant message, phone call or any other type messaging and it may be achieved through any type of network including the illustrated cellular network 44. In response to the notification, the homeowner 16 may send a signal to the control unit portion 40 to either ignore the notification and event or accept more information including images or video about the notification and event. It should be appreciated that the instant security system provides flexibility and selectability in the manner in which the homeowner 16 receives notifications and alerts.

[0027] FIG. 3 depicts one embodiment of control and communication units 40 and 42 which form portions of the security system 10. A microcontroller 60 controls the communication unit 42 and interfaces with the cellular network 44. More specifically, the microcontroller 60 contains all the processing, memory, and interfaces needed for supporting the functionalities of the control unit 40 and communications unit 42. Numerous components are connected to the microcontroller 60; namely, the video camera 22, the exterior microphone 24, and the proximity detector 26 of the communication unit 42.

[0028] Further, the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74. Additionally, components, which are not illustrated as part of the communications unit 42, are connected to the microcontroller 60. A video monitor 76 is coupled to the microcontroller 60 as well as to the video camera 22 and the exterior microphone 24 through a multiplexer 78. It should be appreciated that these components described in FIG. 3 may be connected to the microcontroller 60 and interconnected by wired connections, wireless connections, or a combination thereof.

[0029] The switch 62, which is under the control of the microcontroller 60, administers access to the exterior speaker 28 and determines which input device drives a signal to the exterior speaker 28. In the illustrated implementation, the possible input devices include the OGM player/recorder 64, an interior microphone 80 having a push-to-talk circuit 82, and the cellular telephone 30 via the cellular network interface 70 and the antenna 72. The OGM player/recorder 64 is a device for presenting pre-recorded messages to visitors at the homeowner's local or remote instructions. For example, the homeowner may have a pre-recorded greeting giving specific instructions on where to leave a package. The homeowner may utilize the control panel 66, which may be positioned proximate to the interior microphone 80, to send a signal to the OGM player/recorder 64 to tell a visitor from an overnight delivery service where to leave a package. Alternatively, the homeowner may send a signal to the OGM player/recorder with the cellular telephone 30 as will be discussed in further detail hereinbelow.

[0030] In general, the control panel 66 permits the homeowner or other individual to manage the security system 10. In one implementation, the control panel 66 is onsite as well as accessible through the cellular telephone 30. The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system. By way of example, this feature permits the homeowner to utilize the cellular telephone 30 to notify a home security company or the police department in the instance of a break-in or other crime.

[0031] As previously discussed, the cellular network interface 70 and antenna 72 connect the security system 10 with the cellular network 44. The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74. Moreover, data stored in the data storage unit 74 may be transferred to a different medium or played on the video monitor 76. The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24. The internal microphone 80 with the push-to-talk circuit 82 allows an onsite homeowner or, as previously discussed, another individual, to talk to a visitor. The video monitor 76 and interior microphone 80, when used together, provide a traditional monitor with intercom system for the homeowner.

[0032] FIG. 4 depicts a flow chart of one embodiment of a method for providing security. At block 90, visual and audio communications are captured at an entry point. At block 92, at least a portion of the captured visual and audio communications are relayed to a cellular telephone. At block 94, the at least a portion of the captured visual and audio communications are rendered at the cellular telephone. At block 96, audio communications are captured at the cellular phone. The audio communications are relayed from the cellular phone to the entry point at block 98. At block 100, the audio communications are rendered at the entry point, thereby providing for duplexed audio communications and one-way visual observation in order to achieve an improvement over the traditional video monitor and intercom system.

[0033] FIG. 5 depicts a flow chart of another embodiment of a method for providing security. At block **110**, an individual approaches the entry point. As a result, a proximity detector is actuated at block **112** and, in turn, as shown in block **114**, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block **116**, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block **114**. At the control unit, in one implementation, the data is stored in the data storage.

[0034] At block **118**, if the cellular telephone has teleconferencing functionality or the ability to simultaneously receive both data and voice, then the method advances to block **136** (see paragraph 41). On the other hand, if this functionality is not present in the cellular telephone or if the cellular telephone network being utilized does not support this type of functionality, then the method advances to block **120** wherein the control unit generates an image or video file that includes at least a portion of the visual or audio/visual data collected by the video camera and the exterior microphone. Whether an image file or video file is generated depends on the preferences programmed into the instant security system as well as the capabilities of the cellular network and the cellular telephone.

[0035] At block **122**, the file is sent from the control unit to the cellular telephone via the cellular network. At block **124**, an audio communication circuit between the control unit and the cellular telephone is completed. At block **126**, the identity of the homeowner is authenticated. By way of example, in one implementation, the homeowner may be required to enter a passcode to authenticate the identity of the homeowner. If the homeowner does not enter the passcode, then the call is disconnected. As a further benefit, this type of call authentication or a similar system prevents the control unit from connecting the visitor with the homeowner's voicemail. Accordingly, the homeowner and security system do not provide an unintentional indication to the visitor that the homeowner is not home. Additionally, the homeowner may preprogram the control unit to play a pre-recorded message from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.

[0036] At block **128**, the homeowner is presented with a menu of options that give the homeowner choices in how to handle the visitor's arrival to the home. The homeowner may select an option in a conventional manner such as by pressing a number on the cellular telephone corresponding to the number of the option. Alternatively, for example, a voice activated system may be utilized. By way of example and not by way of limitation, Table 2 presents a matrix that illustrates a portion of the options that the security system of the present invention can make available to the homeowner. Each of these options will be briefly described before returning to the description of FIG. 5 in paragraph 40.

[0037]

TABLE 2

Options for Cellular Telephones without
Teleconferencing Functionality

Option Number	Option
1	No Action
2	Play a Pre-Recorded Greeting
3	Request Further Image or Video Data
4	Hear Audio Only
5	Duplexed Audio Communication
6	Notify Alarm Company
7	Conference Call

[0038] With respect to Option 1: No Action, the approaching individual that actuated the security system may be a family member returning home and entering the home through the front door. In this instance, the homeowner may wish to take no action. In this mode, the security system does not facilitate communication between the parties and the visitor is ignored by the security system.

[0039] With respect to Option 2: Play a Pre-Recorded Greeting, the approaching individual may be a delivery person that wishes to leave a package for the homeowner. The homeowner may select to play a pre-recorded greeting with detailed instructions describing where to leave the package for the delivery person with the OGM player/recorder. It should be appreciated that the security system may be equipped with more than one pre-recorded greeting. By way of further example, the homeowner may be in a remote part of the home or property and play a pre-recorded greeting for a friend that has approached the doorway which politely asks the visiting friend to wait at the door for a couple of minutes. A submenu or other conventional means may be employed to offer the homeowner a choice of pre-recorded messages to play for the visitor.

[0040] With respect to Option 3: Request Further Image or Video Data, the initial file received by the homeowner at the cellular telephone may be blurred or the visitor in the doorway may not be clearly identifiable from the image or video. With this option, the homeowner requests an additional image or video. When this option is selected, since the cellular telephone does not have teleconferencing functionality or the ability to simultaneously receive both voice and data, the control unit temporarily disconnects from the cellular telephone, sends the second image or video file, and then reestablishes audio communication with the cellular telephone. After the audio circuit is reestablished and optionally re-authenticated, the menu may be represented to the homeowner.

[0041] When Option 4: Hear Audio Only is selected by the homeowner, the homeowner chooses only to observe the visitor before taking further action, such as selecting a further option. Option 5: Duplexed Audio Communication permits the homeowner to have a verbal conversation with the visitor in the same manner as if the homeowner was present at the home and using the internal microphone. Option 6: Notify Alarm Company allows the homeowner to notify the alarm company or alternatively the police department of a potential or actual problem. This option is particularly important when the visitor is a perpetrator in the act of a crime such as breaking into the home. With respect to Option 7: Conference Call, the homeowner may conference call a third-party, such as a trusted neighbor that is home, into the conversation with the visitor. As alluded to, these options are exemplary of the robustness of the security system and these options may be original equipment manufacture (OEM) or programmed by the homeowner.

[0042] Returning now to the description of FIG. 5, as indicated by numeral **130**, the homeowner selects Option 5: Duplexed Audio Communication to have a two-way conversation with the visitor. At block **134**, the homeowner views the visual file. This operation may occur at any time or simultaneously with the operations described in blocks **124** through **132**. The operations of blocks **132** and **134** permit the homeowner who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.

[0043] Returning now to decision block **118**, for cellular telephones that have teleconferencing functionality or an equivalent thereof, at block **136**, a communication circuit is established between the control unit and cellular telephone. As previously alluded to, by way of example, some cellular telephones provide for the simultaneous or near simultaneous transfer of voice and data by utilizing the cellular network in conjunction with the Internet. At block **138**, similar to block **126**, the identity of the homeowner is authenticated. Continuing to block **140**, a menu of options, such as the exemplary menu of Table 3, is available to the homeowner.

[0044]

TABLE 3

Options for Cellular Telephones with
Teleconferencing or Equivalent Functionality

Option Number	Option
1	No Action
2	Play a Pre-Recorded Greeting
3	Observe Only

[0045] These available options, where serve as non-limiting examples, are substantially equivalent to the options discussed at block **128**. As indicated in FIG. 5, Option 4: Duplexed Communication is selected. Since the telephone has the ability to simultaneously receive data and voice communications, this option permits the cellular telephone to render a video file with substantially real time video visual and audio captured at the doorway of the home. Alternatively, streaming audio and video may be delivered. The homeowner is therefore allowed to see and hear the visitor while communicating with the visitor orally.

[0046] While this invention has been described with reference to illustrative embodiments, this description is not intended to be construed in a limiting sense. Various modifications and combinations of the illustrative embodiments as well as other embodiments of the invention, will be apparent to persons skilled in the art upon reference to the description. It is, therefore, intended that the appended claims encompass any such modifications or embodiments.

Original

Classifications

IPC	CPC	US Class	ECLA
G08B13/00	G08B13/196 G08B25/08 H04N7/186 H04N7/20	340/541 340/539.1	G08B25/08 G08B13/196 H04N7/18D3 H04N7/20

Persons

Ultimate Owner

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Original Assignees

Original	Standardized	Normalized
ZINSER DUKE W (/api/control?client=&query=pas:("ZINSER%20DUKE%20W")&autosearch=true)	ZINSER DUKE W (/api/control?client=&query=pas:("ZINSER%20DUKE%20W")&autosearch=true)	

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Griggs Bergen LLP (/api/control?client=&query=ag:("Griggs%20Bergen%20LLP")&autosearch=true)		

Legal information

Standardized Post issuance INPADOC

Legal status

Event	Date	Description
Granted	2009-09-01	GRANTED
Filed	2006-11-14	FILED

Designated states

Date	Event code	Description
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Ownership

	2006-11-14							2018-10-03 2019-03-11		
	2006	2008	2010	2012	2014	2016	2018	2020		
ZINSER DUKE W										
SKYBELL TECHNOLOGIES, INC., CALIFORNIA										///
ALARM.COM INCORPORATED, VIRGINIA										///

Payment status

Date	Status	Event code	Description
2020-10-22	Fee paid	M2553	PAYMENT OF MAINTENANCE FEE, 12TH YR, SMALL ENTITY.
2016-09-21	Fee paid	M2552	PAYMENT OF MAINTENANCE FEE, 8TH YR, SMALL ENTITY.
2013-02-05	Fee paid	M2551	PAYMENT OF MAINTENANCE FEE, 4TH YR, SMALL ENTITY.

Litigation/Opposition

Docket number	Docket description	Court	Date Filed
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Product	Type	Active Ingredient	Applicant	Application No.	Application Type	Approval Date	Patent Expiry Date	Patent usage code	Exclusivity Code	Exclusivity Date	Dosage	Strength	Product Number	Route	RLD	Patent Delist Requested
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Citations

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☐							
☐	backward	US5861804A	By other than the examiner	1999-01-19	Computer controlled security and surveillance system	BAKSON	
☐	backward	US5907352A	By other than the examiner	1999-05-25	Door mountable security system	GILLEY TERRY W	
☐	backward	US6023223A	By other than the examiner	2000-02-08	Early warning detection and notification network for environmental conditions	BAXTER JR. JOHN FRANCIS	
☐	backward	US6049353A	By other than the examiner	2000-04-11	Computer network, processing of digitized, compressed, security camera video, intelligently onto hard drives of personal computers	GRAY DARRELL D	
☐	backward	US6060994A	By other than the examiner	2000-05-09	Method for controlling united home security system	TEMPA COMMUNICATION	
☐	backward	US6073192A	By other than the examiner	2000-06-06	Peripheral video conferencing system with control unit that controls presentation of remote video signal through the output connector	RSI SYSTEMS	
☐	backward	US6094213A	By other than the examiner	2000-07-25	Computer conference system with video phone connecting function	SAMSUNG ELECTRONICS	
☐	backward	US6097429A	By other than the examiner	2000-08-01	Site control unit for video security system	ESCO ELECTRONICS ADT SERVICES	
☐	backward	US6226031B1	By other than the examiner	2001-05-01	Video communication/monitoring apparatus and method therefor	NETERGY NETWORKS	
☐	backward	US6271752B1	By other than the examiner	2001-08-07	Intelligent multi-access system	LUCENT TECHNOLOGIES	
☐	backward	US6429893B1	By other than the examiner	2002-08-06	Security system	XIN ALFRED X	
☐	backward	US6466261B1	By other than the examiner	2002-10-15	Door camera unit having a video memory	NILES PARTS	
☐	backward	US6476858B1	By other than the examiner	2002-11-05	Video monitoring and security system	INNOVATION INSTITUTE	
☐	backward	US6542078B2	By other than the examiner	2003-04-01	Portable motion detector and alarm system and method	SCRIPT HENRY J SCRIPT MICHAEL H	
☐	backward	US6590604B1	By other than the examiner	2003-07-08	Personal videoconferencing system having distributed processing architecture	POLYCOM	
☐	backward	US6658091B1	Cited by the examiner	2003-12-02	Lifestyle multimedia security system	SECURITY BROADBAND	
☐	backward	US6661340B1	By other than the examiner	2003-12-09	System and method for connecting security systems to a wireless device	MICROSTRATEGY	
☐	backward	US6714237B2	By other than the examiner	2004-03-30	Apparatus and method for automatically storing an intrusion scene	MENIX ENGINEERING	
☐	backward	US6727811B1	By other than the examiner	2004-04-27	Monitoring system	FENDIS GREGORY	
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☐ CELLULAR PHONE DATA STREAMING FOR SURVEILLANCE AND PERSONAL SECURITY

Publication number WO2010048243A3
 Publication date 2010-07-22
 Application date 2009-10-21

A cellular phone having means for streaming and storing audio, video and photographic data at a remote host for the purposes of personal security and surveillance is disclosed. A cellular phone having a camera, a microphone, a panic trigger, and means for communicating with a wireless network may be used to capture and stream audio, video and photographic data to at least one host of the wireless network. The host may simultaneously provide live streaming audio, video and photographic data to anyone granted access to the host and remotely store the data for future access. Methods and systems for enabling a cellular phone to stream and remotely store captured audio, video and photographic data are also disclosed.

☐ CELLULAR PHONE DATA STREAMING FOR SURVEILLANCE AND PERSONAL SECURITY

Publication number WO2010048243A2
 Publication date 2010-04-29
 Application date 2009-10-21

A cellular phone having means for streaming and storing audio, video and photographic data at a remote host for the purposes of personal security and surveillance is disclosed. A cellular phone having a camera, a microphone, a panic trigger, and means for communicating with a wireless network may be used to capture and stream audio, video and photographic data to at least one host of the wireless network. The host may simultaneously provide live streaming audio, video and photographic data to anyone granted access to the host and remotely store the data for future access. Methods and systems for enabling a cellular phone to stream and remotely store captured audio, video and photographic data are also disclosed.

☐ Cellular Phone Data Streaming for Surveillance and Personal Security

Publication number US20100099461A1
 Publication date 2010-04-22
 Application date 2008-10-22

A cellular phone having means for streaming and storing audio, video and photographic data at a remote host for the purposes of personal security and surveillance is disclosed. A cellular phone having a camera, a microphone, a panic trigger, and means for communicating with a wireless network may be used to capture and stream audio, video and photographic data to at least one host of the wireless network. The host may simultaneously provide live streaming audio, video and photographic data to anyone granted access to the host and remotely store the data for future access. Methods and systems for enabling a cellular phone to stream and remotely store captured audio, video and photographic data are also disclosed.

☐ SYSTEM AND METHOD FOR AUDIO-VISUAL MULTI-SPEAKER SPEECH SEPARATION WITH LOCATION-BASED SELECTION

Publication number US20210312915A1
 Publication date 2021-10-07
 Application date 2020-04-06

A system and method for audio-visual multi-speaker speech separation, including: receiving audio signals captured by at least one microphone; receiving video signals captured by at least one camera; and applying audio-visual separation on the received audio signals and video signals to provide isolation of sounds from individual sources, wherein the audio-visual separation is based, in part, on angle positions of at least one speaker relative to the at least one camera.

☐ Video Monitoring System Incorporating Cellular Phone Technology

Publication number US20070076095A1
 Publication date 2007-04-05
 Application date 2005-10-03

A video monitoring system that incorporates mobile cellular telephone technology to provide images or live video in real time to a parent or business owner for safety, security and surveillance purposes includes a surveillance camera mounted in or adjacent the room or site to be monitored, a control unit for transmitting the images received from the camera to the cellular telephone, a recording device for recording the activity, a electric eye connected to the camera and the control unit for actuating the camera upon physical interruption of the electric beam through, for example, opening a door to the room, and a speaker electrically interconnected to the control unit and the electric eye for broadcasting instructions, guidance, and reminders for the individual after the individual has opened the door and entered the room.

☐ System and method for remote display of security video images

Publication number US20070070185A1
 Publication date 2007-03-29
 Application date 2005-09-27

A system and method for viewing video images from security systems on a remote handheld communications device like a cellular telephone. Video can be collected at a surveillance location, digitized and compressed, and streamed over a telephone line in a compressed form such as MPEG4 to a remote communications device. A menu on the remote device as well as a local joy-stick (or telephone navigation buttons) and other keys could allow selection of various cameras and/or pan, tilt and zoom functions on a particular camera. Split screen displays of more than one camera can be presented. In an alternative embodiment, the security video can be streamed from a web site.

☐ COMPUTER-IMPLEMENTED METHOD FOR RECOMMENDING CHANGES WITHIN A SECURITY SYSTEM



Publication number WO2022050855A1
Publication date 2022-03-10
Application date 2020-09-04

A computer-implemented method for recommending changes in relation to video security camera deployment within a security system is disclosed. The computer-implemented method includes obtaining, at an at least one electronic computing device, video analytics data in respect of a plurality of video frames captured by an at least one video security camera operating under a plurality of operational parameters. When processing of the video analytics data indicates at least one issue in relation to performance of the video security camera, a visual message or an audio message is delivered by a screen or a speaker respectively. The visual or audio message indicates a recommendation in relation to some change, replacement or upgrading of the video security camera.

☐ COMPUTER-IMPLEMENTED METHOD FOR RECOMMENDING CHANGES WITHIN A SECURITY SYSTEM



Publication number US20230291870A1
Publication date 2023-09-14
Application date 2020-09-04

A computer-implemented method for recommending changes in relation to video security camera deployment within a security system is disclosed. The computer-implemented method includes obtaining, at an at least one electronic computing device, video analytics data in respect of a plurality of video frames captured by an at least one video security camera operating under a plurality of operational parameters. When processing of the video analytics data indicates at least one issue in relation to performance of the video security camera, a visual message or an audio message is delivered by a screen or a speaker respectively. The visual or audio message indicates a recommendation in relation to some change, replacement or upgrading of the video security camera.

☐ System and method for audio-visual multi-speaker speech separation with location-based selection



Publication number US11790900B2
Publication date 2023-10-17
Application date 2020-04-06

A system for audio-visual multi-speaker speech separation. The system includes a processing circuitry and a memory containing instructions that, when executed by the processing circuitry, configure the system to: receive audio signals captured by at least one microphone; receive video signals captured by at least one camera; and apply audio-visual separation on the received audio signals and video signals to provide isolation of sounds from individual sources, wherein the audio-visual separation is based, in part, on angle positions of at least one speaker relative to the at least one camera. The system provides for reliable speech processing and separation in noisy environments and environments with multiple users.

☐ A SECURITY SYSTEM



Publication number WO2004079684A1
Publication date 2004-09-16
Application date 2004-03-04

This invention relates to a security system. The security system of the invention includes trigger event sensors, including a motion sensor and a smoke sensor, a surveillance camera, a surveillance microphone, and an electronic control circuit, including a transmitter compatible with a cellular communications network. In use of the system, it is connected in communication with such a network. In response to receiving an input indicative of a trigger event, the control system transmits, via the network, an output signal indicative of the trigger event to a remote telecommunications device of which the contact number is stored in a memory of the control circuit. The control circuit can transmit images and sounds captured by the camera and microphone to the remote device. The system can receive instructions from a remote communications device, via the network, for controlling a local external device, e.g. a light.



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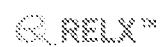
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Document (1)

1. *Patent No. 7,583,191 Issued on Sept. 1 for Security System (Texas Inventor)*

Client/Matter: -None-

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Patent No. 7,583,191 Issued on Sept. 1 for Security System (Texas Inventor)

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September 2, 2009 Wednesday 2:02 PM EST

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Dateline: ALEXANDRIA, Va.

Body

ALEXANDRIA, Va., Sept. 2 -- Duke W. Zinser, Garland, Texas, has developed a security system. The inventor was issued U.S. **Patent** No. **7,583,191** on Sept. 1.

According to the abstract released by the U.S. **Patent** & Trademark Office: "A security system and method for use of the same are disclosed that provide for remote surveillance. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point."

The original application was filed on Nov. 14, 2006. For more information about US Fed News contract awards please contact: Sarabjit Jagirdar, US Fed News, Email:- htsyndication@hindustantimes.com

For any query with respect to this article or any other content requirement, please contact Editor at htsyndication@hindustantimes.com

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Document (1)

1. 8:22cv33_Vivint Inc. V. Ship Holdings LLC

Client/Matter: -None-

Search Terms: 7583191 or 7,583,191

Search Type: Terms and Connectors

Narrowed by:

Content Type
Dockets

Narrowed by
-None-

8:22cv33, Vivint Inc. V. Sb Ip Holdings Llc

US District Court Docket

United States District Court, California Central

(Southern Division - Santa Ana)

This case was retrieved on 06/19/2024

Header

Case Number: 8:22cv33
Date Filed: 01/07/2022
Assigned To: Judge David O. Carter
Referred To: Magistrate Judge Karen E. Scott
Nature of Suit: Patent (830)
Cause: Fed. Question
Lead Docket: 8:22cv00034
Other Docket: None
Jurisdiction: Federal Question

Class Code: Closed
Closed: 07/26/2022
Statute: 28:1331
Jury Demand: Plaintiff
Demand Amount: \$0
NOS Description: Patent

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a Utah corporation |
Plaintiff

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Proceedings

#	Date	Proceeding Text	Source
1	01/07/2022	COMPLAINT Receipt No: ACACDC-32591289 - Fee: \$402, filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7) (Attorney Sterling Arthur Brennan added to party Vivint Inc.(pty:pla))(Brennan, Sterling) (Entered: 01/07/2022)	
2	01/07/2022	CIVIL COVER SHEET filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
3	01/07/2022	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
4	01/07/2022	REPORT ON THE FILING OF AN ACTION Regarding a Patent or a Trademark (Initial Notification) filed by Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
5	01/07/2022	NOTICE of Related Case(s) filed by Plaintiff Vivint Inc.. Related Case(s): 8:22-cv-34 (Brennan, Sterling) (Entered: 01/07/2022)	
6	01/10/2022	NOTICE OF ASSIGNMENT to District Judge Josephine L. Staton and Magistrate Judge Karen E. Scott. (ghap) (Entered: 01/10/2022)	
7	01/10/2022	NOTICE TO PARTIES OF COURT-DIRECTED ADR PROGRAM filed. (ghap) (Entered: 01/10/2022)	
8	01/10/2022	Notice to Counsel Re Consent to Proceed Before a United States Magistrate Judge. (ghap) (Entered: 01/10/2022)	
9	01/10/2022	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney David R Wright on behalf on Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at caod_attyadm@caod.uscourts.gov. You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (ghap) (Entered: 01/10/2022)	

8:22cv33, Vivint Inc. V. Sb Ip Holdings Llc

#	Date	Proceeding Text	Source
10	01/10/2022	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney Michael A Manookin on behalf on Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at cacd_attyadm@caed.uscourts.gov. You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (ghap) (Entered: 01/10/2022)	
11	01/10/2022	NOTICE OF DEFICIENCIES in Request to Issue Summons RE: Summons Request 3 . The following error(s) was found: The caption of the summons must match the caption of the complaint verbatim. If the caption is too large to fit in the space provided, enter the name of the first party and then write see attached.Next, attach a face page of the complaint or a second page addendum to the Summons. The summons cannot be issued until this defect has been corrected. Please correct the defect and re-file your request. (ghap) (Entered: 01/10/2022)	
12	01/11/2022	ORDER TO REASSIGN CASE due to self-recusal pursuant to General Order 21-01 by Judge Josephine L. Staton. Case transferred from Judge Josephine L. Staton to the calendar of Judge David O. Carter for all further proceedings. Case number now reads as 8:22-cv-00033-DOC-(KESx). (dve) (Entered: 01/11/2022)	
13	01/11/2022	INITIAL STANDING ORDER FOLLOWING ASSIGNMENT OF CIVIL CASE TO JUDGE CARTER upon filing of the complaint by Judge David O. Carter. (kd) (Entered: 01/11/2022)	
14	01/11/2022	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/11/2022)	
15	01/12/2022	21 DAY Summons Issued re Complaint (Attorney Civil Case Opening), 1 as to defendant SB IP Holdings LLC. (twdb) (Entered: 01/12/2022)	
16	01/18/2022	NOTICE of Interested Parties filed by Plaintiff Vivint Inc., identifying Vivint Smart Home, Inc., Blackstone Inc., SkyBell Technologies, Inc.. (Brennan, Sterling) (Entered: 01/18/2022)	
17	01/18/2022	APPLICATION of Non-Resident Attorney David R. Wright to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32640606) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order) (Brennan, Sterling) (Entered: 01/18/2022)	
18	01/18/2022	APPLICATION of Non-Resident Attorney Michael A. Manookin to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 1/18/2022, Receipt No. ACACDC32640630) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order) (Brennan, Sterling) (Entered: 01/18/2022)	
19	01/21/2022	ORDER by Judge David O. Carter: granting 17 Non-Resident Attorney David R. Wright APPLICATION to Appear Pro Hac Vice on behalf of plaintiff Vivint Inc, designating Sterling A. Brennan as local counsel. (mrgo) (Entered: 01/21/2022)	
20	01/21/2022	ORDER by Judge David O. Carter: granting 18 Non-Resident Attorney Michael A. Manookin APPLICATION to Appear Pro Hac Vice on behalf of plaintiff Vivint Inc, designating Sterling A. Brennan as local counsel. (mrgo) (Entered: 01/21/2022)	

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#	Date	Proceeding Text	Source
21	02/01/2022	PROOF OF SERVICE Executed by Plaintiff Vivint Inc., upon Defendant SB IP Holdings LLC served on 1/19/2022, answer due 2/9/2022. Service of the Summons and Complaint were executed upon Registered Agent, Corporation Service Company in compliance with Federal Rules of Civil Procedure by personal service. Original Summons returned. (Brennan, Sterling) (Entered: 02/01/2022)	
22	02/09/2022	NOTICE OF MOTION AND MOTION to Dismiss Complaint filed by Defendant SB IP Holdings LLC. Motion set for hearing on 3/21/2022 at 08:30 AM before Judge David O. Carter. (Attachments: # 1 Memorandum, # 2 Proposed Order) (Attorney Aaron Lewis Renfro added to party SB IP Holdings LLC(pty:dft)) (Renfro, Aaron) (Entered: 02/09/2022)	
23	02/10/2022	APPLICATION of Non-Resident Attorney Gary R. Sorden to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32770908) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 02/10/2022)	
24	02/10/2022	APPLICATION of Non-Resident Attorney Brian L. King to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32774060) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 02/10/2022)	
25	02/11/2022	ORDER SETTING SCHEDULING CONFERENCE by Judge David O. Carter. Scheduling Conference set for 3/21/2022 at 08:30 AM before Judge David O. Carter. (kdu) (Entered: 02/11/2022)	
26	02/24/2022	Joint STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 02/24/2022)	
27	02/25/2022	Joint STIPULATION to Continue Motion to Dismiss from March 21, 2022 to April 18, 2022 filed by Plaintiff Vivint Inc..(Brennan, Sterling) (Entered: 02/25/2022)	
28	02/28/2022	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Documents RE: Stipulation to Continue 27 . The following error(s) was/were found: Proposed Document was not submitted as separate attachment. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (twdb) (Entered: 02/28/2022)	
29	02/28/2022	ORDER by Judge David O. Carter, Granting Stipulation to Stay Case 26 . All proceedings in this action are stayed for thirty days, until March 23, 2022. (Motion hearing continued to 4/18/2022 at 08:30 AM before Judge David O. Carter.) (Scheduling Conference continued to 4/18/2022 at 08:30 AM before Judge David O. Carter.) (Joint Status Report due by 4/11/2022.) (twdb) (Entered: 03/01/2022)	
30	03/28/2022	STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 03/28/2022)	
31	03/29/2022	ORDER by Judge David O. Carter: Granting 23 Non-Resident Attorney Gary R. Sorden APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings, LLC, designating Aaron L. Renfro as local counsel. (twdb) (Entered: 03/30/2022)	
32	03/29/2022	ORDER by Judge David O. Carter: Granting 24 Non-Resident	

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#	Date	Proceeding Text	Source
		Attorney Brian L. King APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings, LLC, designating Aaron L. Renfro as local counsel. (twdb) (Entered: 03/30/2022)	
33	03/30/2022	ORDER by Judge David O. Carter, Granting Stipulation 30 . The stay of all proceedings in this action is extended for thirty days, until 4/22/22. (Motion hearing continued to 5/16/2022 at 08:30 AM before Judge David O. Carter., Scheduling Conference continued to 5/16/2022 at 08:30 AM before Judge David O. Carter.) RE 22 . (twdb) (Entered: 03/30/2022)	
34	04/21/2022	Joint STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 04/21/2022)	
35	04/22/2022	ORDER by Judge David O. Carter, Granting Stipulation to Stay 34 . The Scheduling Conference set for May 16, 2022, is continued to June 20, 2022. (Motion hearing (ECF 22) continued to 6/20/2022 at 08:30 AM before Judge David O. Carter.) (twdb) (Entered: 04/25/2022)	
36	04/25/2022	NOTICE of Appearance filed by attorney Christina Le Trinh on behalf of Plaintiff Vivint Inc. (Attorney Christina Le Trinh added to party Vivint Inc.(pty:pla))(Trinh, Christina) (Entered: 04/25/2022)	
37	04/25/2022	NOTICE of Appearance filed by attorney Charles S Barquist on behalf of Plaintiff Vivint Inc. (Attorney Charles S Barquist added to party Vivint Inc.(pty:pla))(Barquist, Charles) (Entered: 04/25/2022)	
38	04/26/2022	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Documents RE: Notice of Appearance 37 , Notice of Appearance 36 . The following error(s) was/were found: Incorrect event selected. Correct event to be used is: Notice of Appearance of Withdrawal of Counsel G123.. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (ak) (Entered: 04/26/2022)	
39	05/27/2022	OPPOSITION to NOTICE OF MOTION AND MOTION to Dismiss Complaint 22 filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit A-D)(Barquist, Charles) (Entered: 05/27/2022)	
40	05/27/2022	REQUEST FOR JUDICIAL NOTICE in Support of Plaintiff's Opposition to Defendant's Motion to Dismiss Complaint for Declaratory Judgment filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Barquist, Charles) (Entered: 05/27/2022)	
41	06/06/2022	JOINT REPORT Rule 26(f) Discovery Plan ; estimated length of trial 70 hours, filed by Plaintiff Vivint Inc... (Barquist, Charles) (Entered: 06/06/2022)	
42	06/06/2022	APPLICATION of Non-Resident Attorney Hoda Rifai-Bashjawish to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33418314) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Proposed Order) (Renfro, Aaron) (Entered: 06/06/2022)	
43	06/06/2022	REPLY in Support of NOTICE OF MOTION AND MOTION to Dismiss Complaint 22 filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4)(Renfro, Aaron) (Entered: 06/06/2022)	
44	06/08/2022	APPLICATION of Non-Resident Attorney Rajakumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33433488) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Certificate of Good Standing (Supreme Court of Texas), # 2 Certificate of Good Standing (Texas Bar), # 3 Proposed Order) (Renfro, Aaron) (Entered: 06/08/2022)	

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#	Date	Proceeding Text	Source
45	06/08/2022	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Rajakumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33433488) 44 . The following error(s) was/were found: Proposed Order has not been flattened and is causing a corruption with the filing. (lt) (Entered: 06/08/2022)	
46	06/08/2022	SCHEDULING NOTICE by Judge David O. Carter re: MOTION to Dismiss Complaint 22 Motion has been reset for hearing on 7/28/2022 at 08:30 AM before Judge David O. Carter. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (kdu) TEXT ONLY ENTRY (Entered: 06/08/2022)	
47	06/08/2022	ORDER ON APPLICATION OF NON-RESIDENT ATTORNEY TO APPEAR IN A SPECIFIC CASE PRO HAC VICE by Judge David O. Carter. APPLICATION to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC, designating Aaron Lewis Renfro as local counsel. granting 42 Non-Resident Attorney Hoda Rifai-Bashjawish (rolm) (Entered: 06/09/2022)	
48	06/09/2022	APPLICATION of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Previously Paid on 6/8/2022, Receipt No. ACACDC-33433488) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 06/09/2022)	
49	06/09/2022	ORDER by Judge David O. Carter: granting 44 48 Non-Resident Attorney Rajkumar Vinnakota APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings LLC, designating Aaron L Renfro as local counsel. (lom) (Entered: 06/09/2022)	
50	06/13/2022	SCHEDULING NOTICE by Judge David O. Carter Scheduling Conference has been set for 7/28/2022 at 08:30 AM before Judge David O. Carter. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (kdu) TEXT ONLY ENTRY (Entered: 06/13/2022)	
51	06/16/2022	APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480739) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/16/2022)	
52	06/16/2022	APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480849) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/16/2022)	
53	06/16/2022	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480849) 52 , APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480739) 51 . The following error(s) was/were found: Local Rule 83-2.1.3.3(a) Application not complete: state and/or federal courts to which the applicant has been admitted are not listed. Case information is incomplete. DJ and MJ initials missing on application and proposed order. Please note Order to Reassign Case, dated 1/11/22, Dkt. 12. Other error(s) with document(s): Failed to list state bars where attorney is licensed. (lt) (Entered: 06/16/2022)	

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#	Date	Proceeding Text	Source
54	06/17/2022	APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 6/16/2022, Receipt No. 33480739) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/17/2022)	
55	06/17/2022	APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 6/16/2022, Receipt No. 33480849) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/17/2022)	
56	07/05/2022	ORDER by Judge David O. Carter: Granting 54 Non-Resident Attorney Jonathan M. Thomas APPLICATION to Appear Pro Hac Vice on behalf of Vivint Inc. Plaintiff, designating Charles S. Barquist as local counsel. (twdb) (Entered: 07/05/2022)	
57	07/05/2022	ORDER by Judge David O. Carter: Granting 55 Non-Resident Attorney Michelle Y. Ku APPLICATION to Appear Pro Hac Vice on behalf of Vivint Inc. Plaintiff, designating Charles S. Barquist as local counsel. (twdb) (Entered: 07/05/2022)	
58	07/14/2022	STIPULATION to Continue Scheduling Conference and Hearing on Defendant's Motion to Dismiss from July 28, 2022 to August 22, 2022 Re: Text Only Scheduling Notice 50 filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Declaration of Gary R. Sorden in Support of Stipulation to Continue Scheduling Conference and Hearing on Defendant's Motion to Dismiss, # 2 Proposed Order)(Renfro, Aaron) (Entered: 07/14/2022)	
59	07/15/2022	Notice of Supplemental Authority in Support of Defendant's Motion to Dismiss Complaint for Declaratory Judgment filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Exhibit A - Memorandum Opinion and Order)(Renfro, Aaron) (Entered: 07/15/2022)	
60	07/19/2022	ORDER CONTINUING SCHEDULING CONFERENCE AND HEARING ON DEFENDANTS MOTION TO DISMISS COMPLAINT by Judge David O. Carter. (Motion hearing continued to 8/22/2022 at 08:30 AM before Judge David O. Carter.) (Scheduling Conference continued to 8/22/2022 at 08:30 AM before Judge David O. Carter.) (twdb) (Entered: 07/19/2022)	
61	07/26/2022	MINUTE ORDER IN CHAMBERS by Judge David O. Carter: ORDER CONSOLIDATING ACTION WITH SACV22-00034. The Court SUA SPONTE CONSOLIDATES this action with No. SA CV 22-00034 The Court CONSOLIDATES this case with No. SA CV 22-00034. This case will be administratively closed and all future filings shall be made under No. SA CV 22-00034. The Clerk shall serve this minute order on the parties. Cases associated with Lead Case SACV22-00034. (Made JS-6. Case Terminated.) (twdb) (Entered: 07/26/2022)	
62	01/09/2023	INITIAL STANDING ORDER FOLLOWING ASSIGNMENT OF CIVIL CASE TO JUDGE CARTER. (kdu) (Entered: 01/09/2023)	

Patents

Number	Title	Issued	Class	Subclass
7,193,644	Automated audio video messaging and answering system	03/20/2007	348	14.06
7,583,191	Security system and method for use of same	09/01/2009	340	541
8,154,581	Audio-video communication system for receiving person at entrance	04/10/2012	348	14.06
8,164,614	Communication and monitoring system	04/24/2012	348	14.06

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Number	Title	Issued	Class	Subclass
9,414,030	Communication and monitoring system	08/09/2016	1	1
9,432,638	Communication and monitoring system	08/30/2016	1	1
9,485,478	Communication and monitoring system	11/01/2016	1	1
9,516,284	Communication and monitoring system	12/06/2016	1	1
9,635,323	Communication and monitoring system	04/25/2017	1	1
9,648,290	Communication and monitoring system	05/09/2017	1	1
10,674,120	Communication and monitoring system	06/02/2020	1	1

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**REEXAMINATION OR SUPPLEMENTAL
EXAMINATION – PATENT OWNER POWER OF
ATTORNEY OR REVOCATION OF POWER OF
ATTORNEY WITH A NEW POWER OF ATTORNEY
AND CHANGE OF CORRESPONDENCE ADDRESS
FOR REEXAMINATION OR SUPPLEMENTAL
EXAMINATION AND PATENT**

Control Number(s)	
Filing Date(s)	
First Named Inventor	Duke Zinser
Title	
Patent Number	7583191
Examiner Name	
Attorney Docket No(s)	

I. Power of Attorney. This form may be used to change the Power of Attorney in a reexamination or supplemental examination proceeding (or multiple proceedings where merged). This form may also be used to change the Power of Attorney in the patent file; in such a case, a copy of this form will be placed in both the patent file and the reexamination or supplemental examination proceeding.

A. Revocation of Previous Power of Attorney. I hereby revoke all previous patent owner powers of attorney, if any, given:

- ☐ in the above-identified reexamination or supplemental examination proceeding control number(s) (more than one may be changed only if the proceedings are merged).
- ☒ in the file of the above-identified patent.

(check BOTH boxes if change in BOTH the patent file and the reexamination or supplemental examination proceeding is requested).

B. Designation of Power of Attorney.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the Customer Number identified in the box at right as my/our attorney(s) or agent(s) to prosecute the proceeding(s)/patent identified above and selected in section I(A), and to transact all business in the United States Patent and Trademark Office connected therewith:

178493

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the proceeding(s) identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Authorization for the Power of Attorney is provided by the signature on page 2 of this form.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0035. Public burden for this form is estimated to average 15 minutes hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. If filing this completed form by mail, send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

II. Change of Correspondence Address

Please recognize or change the correspondence address for the above-identified reexamination or supplemental examination proceeding control number(s) (more than one may be changed **only** if they are merged proceedings) **and for the file of the above-identified patent** to be:

☒ The address associated with the above-identified Customer Number.

OR

☐ The address associated with the Customer Number identified in the box at right:

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Address					
City		State		Zip	
Country					
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NOTE: THE CORRESPONDENCE ADDRESS FOR THE REEXAMINATION OR SUPPLEMENTAL EXAMINATION PROCEEDING CONTROL NUMBER(S) MUST BE THE SAME AS THAT FOR THE PATENT. SEE 37 CFR 1.33.

III. Authorization for Power of Attorney and (if selected) Change of Correspondence Address

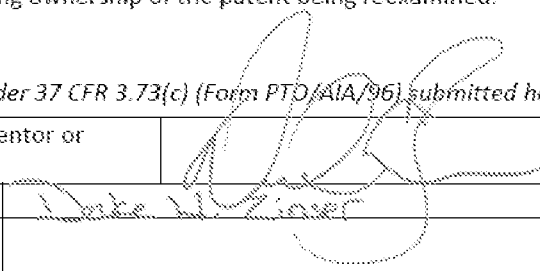
I am the:

☒ Inventor, having ownership of the patent being reexamined.

OR

☒ Patent owner.

Statement under 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herewith or filed on _____.

Signature of Inventor or Patent Owner		Date	5-29-24
Name	Duke W. Zinser	Telephone	972-467-4875
Title and Company			

NOTE: Signatures of all the inventors or patent owners of the entire interest or their representative(s) are required. If more than one signature is required, submit multiple forms, check the box below, and identify the total number of forms submitted in the blank below.

☒ A total of 1 forms are submitted. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
90/019,542

RECEIPT DATE / TIME
06/21/2024 11:27:56 AM Z ET

ATTORNEY DOCKET #
-

Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 66061783

FILING DATE -

CUSTOMER # 31814

FIRST NAMED INVENTOR Duke W. Zinser

CORRESPONDENCE ADDRESS -

AUTHORIZED BY -

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
POA.pdf	2	Power of Attorney	407 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
POA.pdf	433A0FB102E006C3BC661BA59F1E520D83DB33ADE064B1A84 B9314DE09D147F1B6C27C7EE0FC208269EBA23B15EDDB51E 4240328998EF9C050DC500CAFF6D664

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

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New International Application Filed with the USPTO as a Receiving Office

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BIB DATA SHEET

CONFIRMATION NO. 4697

SERIAL NUMBER 90/019,542	FILING or 371(c) DATE 06/19/2024 RULE	CLASS 340	GROUP ART UNIT 3992	ATTORNEY DOCKET NO.	
APPLICANTS INVENTORS 7583191, Residence Not Provided; Duke W. Zinser, Garland, TX; Patent Owner, Residence Not Provided; ** CONTINUING DATA ***** This application is a REX of 11/559,808 11/14/2006 PAT 7583191 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **					
Foreign Priority claimed ☐ Yes ☐ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and Acknowledged <u>Examiner's Signature</u> <u>Initials</u>		☐ Met after Allowance STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 3
ADDRESS Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226 UNITED STATES					
TITLE SECURITY SYSTEM AND METHOD FOR USE OF SAME					
FILING FEE RECEIVED 0.00	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		



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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/019,542	06/19/2024	7583191

178493
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

CONFIRMATION NO. 4697
REEXAM ASSIGNMENT NOTICE



Date Mailed: 06/25/2024

NOTICE OF ASSIGNMENT OF REEXAMINATION REQUEST

The above-identified request for reexamination has been assigned to Art Unit 3992. All future correspondence to the proceeding should be identified by the control number listed above and directed to the assigned Art Unit.

A copy of this Notice is being sent to the latest attorney or agent of record in the patent file or to all owners of record. (See 37 CFR 1.33(c)). If the addressee is not, or does not represent, the current owner, he or she is required to forward all communications regarding this proceeding to the current owner(s). An attorney or agent receiving this communication who does not represent the current owner(s) may wish to seek to withdraw pursuant to 37 CFR 1.36 in order to avoid receiving future communications. If the address of the current owner(s) is unknown, this communication should be returned within the request to withdraw pursuant to Section 1.36.

NOTICE OF USPTO EX PARTE REEXAMINATION PATENT OWNER STATEMENT WAIVER PROGRAM

The USPTO has implemented a pilot program where, after a reexamination proceeding has been granted a filing date and before the examiner begins his or her review, the patent owner may orally waive the right to file a patent owner's statement. See *"Pilot Program for Waiver of Patent Owner's Statement in Ex Parte Reexamination Proceedings,"* 75 FR 47269 (August 5, 2010). One goal of the pilot program is to reduce the pendency of reexamination proceedings and improve the efficiency of the reexamination process.

Ordinarily when ex parte reexamination is ordered, the USPTO must wait until after the receipt of the patent owner's statement and the third party requester's reply, or after the expiration of the time period for filing the statement and reply (a period that can be as long as 5 to 6 months), before mailing a first determination of patentability. The USPTO's first determination of patentability is usually a first Office action on the merits or a Notice of Intent to Issue Reexamination Certificate (NIRC).

Under the pilot program, the patent owner's oral waiver allows the USPTO to act on the first determination of patentability immediately after determining that reexamination will be ordered, and in a suitable case issue the reexamination order and the first determination of patentability (which could be a NIRC if the claims under reexamination are confirmed) at the same time.

Benefits to the Patent Owner for participating in this pilot program include reduction in pendency.

To participate in this pilot program, Patent Owners may contact the USPTO's Central Reexamination Unit (CRU) at 571-272-7705. The USPTO will make the oral waiver of record in the reexamination file in an interview summary and a copy will be mailed to the patent owner and any third party requester.

cc: Third Party Requester(if any)

/rbell/

Legal Instruments Examiner
Central Reexamination Unit 571-272-7705; FAX No. 571-273-9900



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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/019,542	06/19/2024	7583191

178493
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

CONFIRMATION NO. 4697
REEXAMINATION REQUEST
NOTICE



Date Mailed: 06/25/2024

NOTICE OF STREAMLINED REEXAMINATION REQUEST FILING DATE

(Patent Owner Requester)

Requester is hereby notified that the filing date of the request for reexamination is 06/19/2024, the date the required fee was received. (See CFR 1.510(d)).

A decision on the request for reexamination will be mailed within three months from the filing date of the request for reexamination. (See 37 CFR 1.515(a)).

Pursuant to 37 CFR 1.33(c), future correspondence in this reexamination proceeding will be with the latest attorney or agent of the record in the patent file.

The paragraphs checked below are part of this communication:

- ☐ 1. The party receiving the courtesy copy is the latest attorney or agent of record in the patent file.
- ☐ 2. The person named to receive the correspondence in this proceeding has not been made the latest attorney or agent of record in the patent file because:
- ☐ A. Requester's claim of ownership of the patent is not verified by the record.
- ☐ B. The request papers are not signed with a real or apparent binding signature.
- ☐ C. The mere naming of a correspondence addressee does not result in that person being appointed as the latest attorney or agent of record in the patent file.
- ☐ 3. Addressee is the latest attorney or agent of record in the patent file.
- ☐ 4. Other _____

/rbell/

Legal Instruments Examiner
Central Reexamination Unit 571-272-7705; FAX No. 571-273-9900



United States Patent and Trademark Office

Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

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Kathi Vidal

Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

Derrick Brent

Deputy Under Secretary of Commerce for Intellectual Property and
Deputy Director of the United States Patent and Trademark Office



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/019,542	06/19/2024	7583191		4697
178493	7590	06/27/2024		
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226			EXAMINER NGUYEN, LINH M	
			ART UNIT 3992	PAPER NUMBER
			MAIL DATE 06/27/2024	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<i>Ex Parte Reexamination Interview Summary – Pilot Program for Waiver of Patent Owner's Statement</i>	Control No. 90/019,542	Patent Under Reexamination is Requested 7,583,191	
	Examiner NGUYEN, LINH	Art Unit 3992	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

All participants (USPTO official and patent owner):

(1) Kirby Drake, #55126

(2) Renee Preston

(3) _____

(4) _____

Date of Telephonic Interview: 21 June 2024.

A. The USPTO official requested waiver of the patent owner's statement pursuant to the pilot program for waiver of patent owner's statement in *ex parte* reexamination proceedings.*

☒ The patent owner **agreed** to waive its right to file a patent owner's statement under 35 U.S.C. 304 in the event reexamination is ordered for the above-identified patent.

☐ The patent owner **did not agree** to waive its right to file a patent owner's statement under 35 U.S.C. 304 at this time.

☐ USPTO personnel were unable to reach the patent owner.**

B. The Patent Owner of record telephoned the Office and indicated they would like to participate in the pilot program for waiver of patent owner's statement in *ex parte* reexamination proceedings.*

☐ The Patent owner of record telephoned the Office and **agreed** to waive its right to file a patent owner's statement under 35 U.S.C. 304 in the event reexamination is ordered for the above-identified patent.

The patent owner is not required to file a written statement of this telephone communication under 37 CFR 1.560(b) or otherwise. However, any disagreement as to this interview summary must be brought to the immediate attention of the USPTO, and no later than one month from the mailing date of this interview summary. Extensions of time are governed by 37 CFR 1.550(c).

*For more information regarding this pilot program, see *Pilot Program for Waiver of Patent Owner's Statement in Ex Parte Reexamination Proceedings*, 75 Fed. Reg. 47269 (August 5, 2010), available on the USPTO Web site at <http://www.uspto.gov/patents/law/notices/2010.jsp>.

**The patent owner may contact the USPTO personnel at (571) 272-7705 or at the telephone number provided below if the patent owner decides to waive the right to file a patent owner's statement under 35 U.S.C. 304.

/RENEE M PRESTON/
CRU Paralegal, OCRU

(571) 272-1607

Signature and telephone number of the USPTO official, who contacted, was contacted by, or attempted to contact the patent owner.

cc: Requester (if third party requester)



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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90/019,542

06/19/2024

7583191

4697

178493 7590 07/31/2024
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

EXAMINER

NGUYEN, LINH M

ART UNIT	PAPER NUMBER
----------	--------------

3992

MAIL DATE	DELIVERY MODE
-----------	---------------

07/31/2024

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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KIRBY DRAKE LAW PLLC : (For Patent Owner)
2550 Pacific Ave :
Suite 700 :
Dallas, TX 75226 :

In re Zinzer : **DECISION *SUA SPONTE***
Ex Parte Reexamination Proceeding : **VACATING *EX PARTE***
Control No. 90/019,542 : **REEXAMINATION**
Request Deposited: June 19, 2024 : **FILING DATE**
For: U.S. Patent No. 7,583,191 B2 :

**DECISION *SUA SPONTE* VACATING *EX PARTE*
REEXAMINATION FILING DATE**

The *ex parte* reexamination request papers deposited on June 19, 2024, and assigned Control No. 90/019,542 (the '542 reexamination proceeding), are before the Director of the Central Reexamination Unit for consideration of whether to vacate the assigned filing date for failure to comply with the provisions of 37 CFR 1.510(b).

This decision constitutes notice that, pursuant to 37 CFR 1.510(c), the filing date of June 19, 2024, which was assigned to the request papers for the above-captioned *ex parte* reexamination proceeding, is hereby **vacated**, because the papers fail to comply with the requirements for an *ex parte* reexamination proceeding set forth in 37 CFR 1.510, for the reasons set forth below.

In order to obtain a filing date for the request papers, Patent Owner Requester must, within **thirty (30) days** of the mailing date of this decision, file a response to this decision which remedies the defects set forth in this decision and makes the request papers compliant with the requirements of 37 CFR 1.510(b).

REVIEW OF FACTS

1. On September 1, 2009 U.S. Patent No. 7,583,191 B2 (the '191 patent) was issued.
2. On June 19, 2024 Patent Owner Requestor deposited a request for *ex parte* reexamination of the '191 patent, which was assigned reexamination Control No. 90/019,542 (the '542 reexamination proceeding).
3. On June 25, 2024 a Notice of Reexamination Request Filing Date was mailed, which assigned a filing date of June 19, 2024 for the '542 reexamination proceeding.

STATUTES, REGULATIONS AND/OR PATENT EXAMINING PROCEDURES

37 CFR 1.510 provides, in relevant part:

(b) Any request for reexamination must include the following parts:

(2) An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested. For each statement of the patent owner and accompanying information submitted pursuant to § 1.501(a)(2) which is relied upon in the detailed explanation, the request must explain how that statement is being used to determine the proper meaning of a patent claim in connection with the prior art applied to that claim and how each relevant claim is being interpreted. If appropriate, the party requesting reexamination may also point out how claims distinguish over cited prior art. (emphasis added)

MPEP 2217 provides, in relevant part:

I. EXPLANATION MUST BE COMPLETE

The mere citation of new patents or printed publications without an explanation does not comply with 37 CFR 1.510(b)(2). Requester must present an explanation of how the cited patents or printed publications are applied to all claims which requester considers to merit reexamination. This not only sets forth the requester's position to the Office, but also to the patent owner (where the patent owner is not the requester). A request for reexamination, including the citation form (form on which the references are listed), must not include citations to background references or other references which are not used to support a SNQ or proposed rejection of the claims, and explained in the request as to providing such support. Without explanation for each of the references the request seeks to make of record, the request lacks the requisite "detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested." (emphasis added)

DISCUSSION

I. The Request Does Not Provide a Detailed Explanation of the Pertinency and Manner of Applying the Cited Prior Art to Every Claim for which Reexamination is Requested Pursuant to 37 CFR 1.510(b)(2)

A review of the '542 Request indicates that the Request fails to provide a detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested, as required by 37 CFR 1.510(b)(2) and MPEP 2217. The Request purports to meet this requirement by presenting a discussion on pages 4-5 of the Request and the claim charts presented as Exhibit F. However, while Patent Owner Requestor requests that claims 1-20 be reexamined in view of 3 prior art references, the Request only provides a detailed explanation of the pertinency and manner of applying these cited prior art references to independent claims 1, 8, 14 and 19 of the '191 patent. The Request provides no specific detail regarding which particular teachings within the cited references meet the limitations of dependent claims 2-7, 9-13, 15-18 and 20 for which Patent Owner Requestor asserts the cited prior art raises a substantial new question of patentability (SNQ). In section IV of the Request titled "**Detailed Explanation of Manner of Applying Prior Art**", in discussing dependent claims 2-7, 9-13, 15-18 and 20, Patent Owner Requestor merely states:

"Claims 2-7 and 20 depend directly or indirectly from independent claims 1 and 19 and inherit all features and limitations of the base claim from which they depend. Accordingly, claims 2-7 and 20 are invalid for at least the reasons as set forth with respect to claims 1 and 19."

"Claims 9-13 and 15-18 depend directly or indirectly from independent claims 8 and 14 and inherit all features and limitations of the base claim from which they depend. Accordingly, claims 9-13 and 15-18 are invalid for at least the reasons as set forth with respect to claims 8 and 14."

(See pages 4 and 5 of the Request, respectively).

This does not meet the requirement under 37 CFR 1.510(b)(2), which requires providing a detailed explanation of the pertinency and manner of applying the cited prior art because the Request does not provide any explanation of which teachings within those references meet or suggest the limitations of claims 2-7, 9-13, 15-18 and 20.

As indicated above, MPEP 2217 states "[t]he mere citation of new patents or printed publications without an explanation does not comply with 37 CFR 1.510(b)(2). Requester must present an explanation of how the cited patents or printed publications are applied to all claims which requester considers to merit reexamination". This section further states "[w]ithout explanation for each of the references the request seeks to make of record, the request lacks the requisite 'detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested.'"

Thus, because the Request fails to provide a detailed explanation as to how the cited prior art meets or does not meet all limitations of all of the challenged claims, the Request fails to comply with both 37 CFR 1.510(b)(2) and MPEP 2217.

CONCLUSION

Because the June 19, 2024 reexamination request fails to meet the requirements of 37 CFR 1.510(b)(2), pursuant to 37 CFR 1.510(c), the filing date of June 19, 2024, which was assigned to the request papers in the Notice mailed June 25, 2024 for the above-captioned *ex parte* reexamination proceeding, is hereby **vacated**.

REQUESTER'S RECOURSE

In view of the vacatur of the June 25, 2024, "Notice of Reexamination Request Filing Date" mailed for the '542 proceeding, Patent Owner Requester is given **one opportunity** to correct the request, should Patent Owner so desire (see MPEP 2227(B)(1)).

If Patent Owner Requester wishes to respond to this decision, Patent Owner Requester must file a corrected request in accordance with this decision by:

Providing a detailed explanation of how all of the prior art cited by the request as raising a substantial new question of patentability applies for all claims for which reexamination is requested, as required by 37 C.F.R. § 1.510(b)(2), by explaining how the cited documents identified for that proposed ground are applied to meet or teach each of the challenged patent claim limitations.

In order to obtain a filing date for the request papers, Patent Owner Requester must, within thirty (30) days of the mailing date of this decision, file a response to this decision which makes the request papers filing date compliant. The response must be supplied as a corrected request.

The response may be mailed to the Central Reexamination Unit (CRU), attn: "Box *Ex Parte* Reexam" at the USPTO address indicated below, or hand carried to the CRU at the address indicated below.

A corrected request must not be facsimile transmitted.

Any response may be followed by a telephone call to the Central Reexamination Unit at (571) 272-7705.

Patent Owner Requester has **one opportunity** to make the request papers filing date compliant. If the response to this decision fails to cure the defect(s) identified in this decision or adds a new defect, then processing of the request papers will be terminated, and the request papers will

either be discarded or treated as a prior art citation under 37 CFR 1.501, at the Office's discretion. See 37 CFR § 1.510(c).

If the request papers are made filing date compliant, the date of the receipt of the corrected request will be the filing date of the reexamination proceeding. See 37 CFR § 1.510(d).

CONCLUSION

1. As discussed above, the filing date assigned to the request papers for *ex parte* reexamination proceeding Control No. 90/019,542 is hereby **vacated** for failure of the request papers to comply with the filing date requirements for an *ex parte* reexamination proceeding, as set forth in 37 CFR § 1.510(b).
2. In order to obtain a filing date for the request papers, Patent Owner Requester must, **within thirty (30) days of the mailing date of this decision**, file a response to this decision which makes the request papers filing-date compliant, pursuant to the guidelines set forth above.
3. Patent Owner Requester is being provided with only **one opportunity** to make the request papers filing-date compliant. If the response to this decision fails to cure the defects identified in this decision, or adds a new defect, processing of the request papers will be terminated, and the request papers will either be discarded, expunged, or treated as a prior art citation under 37 CFR § 1.501, at the Office's option. If the request papers are made filing date compliant, the date of the receipt of the corrected request will be the filing date of the reexamination proceeding.
4. Any response to this decision should be directed to:

By Patent Center: Registered users may submit the response via Patent Center at <https://patentcenter.uspto.gov/>

By Mail: Mail Stop *Ex Parte* Reexam
Attn: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

By Hand: Customer Service Window
Attn: Central Reexamination Unit
Randolph Building, Lobby Level
401 Dulany Street
Alexandria, VA 22314

5. Any response to this decision may be followed by a telephone call to the Central Reexamination Unit at (571) 272-7705 to ensure receipt and processing.

6. Telephone inquiries related to this decision should be directed to Stephen Stein, Managing Quality Assurance Specialist, at (571) 272-1544.

/David P. Ruschke/

David P. Ruschke

Director, Central Reexamination Unit

- U.S. Patent No. 5,428,388 (hereinafter *Von Bauer*) (Exhibit B)
- U.S. Patent Application Publication No. 2004/0080615 (hereinafter *Klein*) (Exhibit C)
- WO 01/93220 (hereinafter *Menard*) (Exhibit D)

1. A doorbell monitoring system comprising:	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i> , 4:28-34.
a doorway having an environment; a doorbell located in the doorway, the ringing of the doorbell being a triggering event;	<p>“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building.” – <i>Von Bauer</i>, Abstract.</p> <p>“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u>, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>
a video camera and an external microphone disposed in the entry point, the video camera and external microphone, responsive to the triggering event, for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications;	<p>“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building. A microphone and television camera in the sensor station modulate signals, preferably of radio frequency, emitted by a wireless transmitter in the sensor station.” – <i>Von Bauer</i>, Abstract</p> <p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing</p>

	<p>station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p> <p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“In one embodiment, the method includes communicating a video image between the module and the device.” – <i>Menard</i>, 7:4-6.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
an external speaker disposed in the entry point, the external speaker for rendering received cellular audio communications;	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and <u>outputted from a loudspeaker in the sensing station</u>, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>
a control unit disposed in communication with the video	<p>“An embodiment of present system 100 is depicted in Figure 1 and includes module 200, long distance communication ("LD comm") module 250, communication and monitor</p>

<p>camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the entry point visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and</p>	<p>service facility ("facility") 300, and personal data unit ("PDU") 400. Module 200 is in wireless communication with LD comm module 250 via link 215. LD comm module 250 is also in wireless 25 communication with facility 300 via link 210 and in wireless communication with PDU 400 via link 225. Facility 300 is in communication with PDU 400 via link 215. In addition, module 200 is in wireless communication with PDU 400 via link 220 via link 220." – <i>Menard</i>, 12:20-28.</p>
<p>a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.</p>	<p>"Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system." – <i>Von Bauer</i>, 4:24-27</p> <p>"Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u>" – <i>Von Bauer</i>, 5:6-18</p> <p>"Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system." – <i>Von Bauer</i>, 4:28-34</p>

8. A method for providing doorbell monitoring, the method comprising:	“An object of the present invention is to provide a system for communicating information from a remote location to a monitoring location, without requiring interconnecting wires between the respective locations.” – <i>Von Bauer</i> , 3:41-44
ringing of a doorbell at an entry point;	“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u> , or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i> , 5:6-18
responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;	“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i> , 5:6-18
relaying at least a portion of the captured visual and audio communications to a cellular phone;	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p> <p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p>

	<p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“In one embodiment, the method includes communicating a video image between the module and the device.” – <i>Menard</i>, 7:4-6.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
rendering the least a portion of the captured visual and audio communications at the cellular phone;	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“One aspect of the invention provides a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.” <i>Klein</i>, [0008].</p>

	<p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“A user, equipped with PDU 400 can respond in a number of ways. In one embodiment, the user may elect to open an audio communication channel 20 by entering a command using PDU 400. Upon opening an audio communication channel, the caller and user can engage in bidirectional verbal discourse. In one embodiment, the user may opt to receive a graphical image of the caller using PDU 400. Entry of an appropriate command causes exterior module 200D to capture an image using exterior video camera 370 and transmit said image to 25 PDU 400. The graphical image may include a still image or real-time video images.” – <i>Menard</i>, 21:18-26.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
capturing audio communications at the cellular phone;	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p>
relaying the audio communications from the cellular phone to the entry point; and	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u>” – <i>Von Bauer</i>, 5:6-18</p>

	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p>
rendering the audio communications at the entry point.	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and <u>outputted from a loudspeaker in the sensing station</u>, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>

14. A doorbell monitoring system comprising:	<p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p>
a doorbell located at an entry point;	<p>“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building.” – <i>Von Bauer</i>, Abstract</p>
means, responsive to the ringing of the doorbell, for capturing visual and audio communications at the entry point;	<p>“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u>, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p>

<p>means for relaying at least a portion of the captured visual and audio communications to a cellular phone;</p>	<p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. <u>Both visual images of, and voice transmissions from, the visitor may be sent via the RF link.</u> An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – <i>Von Bauer</i>, 5:6-18</p> <p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p> <p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“In one embodiment, the method includes communicating a video image between the module and the device.” – <i>Menard</i>, 7:4-6.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
<p>means for rendering the least a portion of the captured visual and audio communications at the cellular phone;</p>	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p>

	<p>“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i>, 4:28-34</p> <p>“One aspect of the invention provides a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.” <i>Klein</i>, [0008].</p> <p>“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – <i>Menard</i>, 20:13-17.</p> <p>“A user, equipped with PDU 400 can respond in a number of ways. In one embodiment, the user may elect to open an audio communication channel 20 by entering a command using PDU 400. Upon opening an audio communication channel, the caller and user can engage in bidirectional verbal discourse. In one embodiment, the user may opt to receive a graphical image of the caller using PDU 400. Entry of an appropriate command causes exterior module 200D to capture an image using exterior video camera 370 and transmit said image to 25 PDU 400. The graphical image may include a still image or real-time video images.” – <i>Menard</i>, 21:18-26.</p> <p>“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – <i>Menard</i>, 16:24-26.</p>
means for capturing audio communications at the cellular phone;	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27</p>

means for relaying the audio communications from the cellular phone to the entry point; and	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – Von Bauer, 4:28-34
means for rendering the audio communications at the entry point.	“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u> ” – Von Bauer, 5:6-18

19. A system for providing doorbell monitoring, the system comprising:	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – Von Bauer, 4:28-34
a doorway to a home having an environment;	“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building.” – Von Bauer, Abstract
a doorway located in the doorway, the ringing of the doorbell being a triggering event;	“Circuitry included in the sensing station responds to <u>actuation of the doorbell button</u> , or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – Von Bauer, 5:6-18
a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the	“A communication apparatus for monitoring sounds and images at a remote location, such as the entranceway of a dwelling or other building includes a sensor station located at the entranceway, and a monitor station located within the building. A microphone and

triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

television camera in the sensor station modulate signals, preferably of radio frequency, emitted by a wireless transmitter in the sensor station.” – *Von Bauer*, Abstract

“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building.

Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.” – *Von Bauer*, 5:6-18

“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – *Von Bauer*, 4:24-27

“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – *Von Bauer*, 4:28-34

“In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400.” – *Menard*, 20:13-17.

“In one embodiment, the method includes communicating a video image between the module and the device.” – *Menard*, 7:4-6.

“Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone.” – *Menard*, 16:24-26.

<p>a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway; an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;</p>	<p>“As was described above, activation of a Video Doorbell Station 31 from a standby mode to an operating mode may be initiated by depressing doorbell button 37. Video Doorbell Station 31 desirably incorporates alternate means of being switched from a standby mode to an operating mode. Thus, as shown in FIG. 13, Video Doorbell Station 31 includes a "human presence sensor" (preferably an infrared proximity detector) 38 having a field of view encompassing a desired region, near the entrance of a building, for example.” – <i>Von Bauer</i>, 13:10-19.</p>
<p>a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and</p>	<p>“An embodiment of present system 100 is depicted in Figure 1 and includes module 200, long distance communication ("LD comm") module 250, communication and monitor service facility ("facility") 300, and personal data unit ("PDU") 400. Module 200 is in wireless communication with LD comm module 250 via link 215. LD comm module 250 is also in wireless 25 communication with facility 300 via link 210 and in wireless communication with PDU 400 via link 225. Facility 300 is in communication with PDU 400 via link 215. In addition, module 200 is in wireless communication with PDU 400 via link 220 via link 220.” – <i>Menard</i>, 12:20-28.</p>
<p>a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor</p>	<p>“Another object of the invention is to provide a video doorbell system including a hand-held portable device for communicating by voice with a remote location and for controlling operation of a video monitoring system.” – <i>Von Bauer</i>, 4:24-27.</p> <p>“Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. <u>An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer.</u>” – <i>Von Bauer</i>, 5:6-18.</p>

the home while away and the homeowner and individual to communicate as if the homeowner was at home.	“Another object of the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system.” – <i>Von Bauer</i> , 4:28-34.
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Duke Zinser	§	
		§	REQUEST FOR <i>EX PARTE</i>
Patent No.:	7,583,191	§	REEXAMINATION
		§	
Issued:	September 1, 2009	§	Application No. 90/019,542
		§	Confirmation No. 4697
For:	Security system and method for use of same	§	
		§	

EX PARTE REEXAMINATION

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF EFS-WEB FILING

Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on August 15, 2024.

/Kirby Drake/

Kirby Drake

RESPONSE TO DECISION VACATING *EX PARTE* REEXAMINATION DATE

Patent Owner/Assignee acknowledges receipt of the Decision Vacating *Ex Parte* Reexamination Date mailed July 31, 2024. Patent Owner/Assignee has amended the Request and Transmittal Form to only seek reexamination of independent claims 1, 8, 14, and 19. This is believed to address the alleged deficiencies of the initial Request. For completeness, Patent Owner/Assignee submits the Corrected Request, Claim Chart, and Corrected Transmittal Form.

Respectfully submitted,

Date: August 15, 2024

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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
90/019,542RECEIPT DATE / TIME
08/15/2024 05:34:08 PM Z ETATTORNEY DOCKET #
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Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 66805584

FILING DATE 06/19/2024

CUSTOMER # 178493

FIRST NAMED
INVENTOR - 7583191CORRESPONDENCE
ADDRESS -

AUTHORIZED BY -

Documents

TOTAL DOCUMENTS: 4

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Response_to_Notice_Zinser. pdf	1	Reexam follow-on papers received in Office of Patent Application Processing(OPAP)	91 KB
Request_Zinser.pdf	5	Receipt of Corrected Original Ex Parte Request	128 KB
sb0057.pdf	4	Reexam Miscellaneous Incoming Letter	332 KB
Exhibit_F_Zinser_ReExam_ Charts.pdf	13	Receipt of Original Ex Parte Reexam fewer than 40 Pages Rule 1.20(C)(1)	137 KB

Digest

DOCUMENT**MESSAGE DIGEST(SHA-512)**

Response_to_Notice_Zinser.pdf

0B5DBE4AB3731A396081C35B730E7B7535DF574841536D51D
283AEDF0567293D067B78F95F846188B8107CF29D0696B6364
E4DC671B461E99295E3E83D0092CD

Request_Zinser.pdf

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sb0057.pdf

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Exhibit_F_Zinser_ReExam_Charts.pdf

C7222CA6ED53AADC0D3C6128EA8149A9937B2835BA9F41D1
E57B66E716C126B40A3FEAA8AC47D80209D2F703C5593EDC
9CD275938498079971940912DA1DD612

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Also referred to as FORM PTO-1465)

REQUEST FOR *EX PARTE* REEXAMINATION TRANSMITTAL FORM

Address to:
Mail Stop *Ex Parte* Reexam
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney Docket No.: _____

Date: August 15, 2024

1. ☒ This is a request for *ex parte* reexamination pursuant to 37 CFR 1.510 of patent number 7,583,191 issued September 1, 2009. The request is made by:
☒ patent owner. ☐ third party requester.
2. ☒ The name and address of the person requesting reexamination is:
Duke Zinser
709 N. Glenville Drive Suite 200
Richardson, Texas 75081
3. Requester ☒ asserts small entity status (37 CFR 1.27) or ☐ certifies micro entity status (37 CFR 1.29). Only a patent owner requester can certify micro entity status. Form PTO/SB/15A or B must be attached to certify micro entity status.
4. This request is accompanied by payment of the reexamination fee as set forth in:
☐ 37 CFR 1.20(c)(2); or
☒ 37 CFR 1.20(c)(1). In checking this box for payment of the fee set forth in 37 CFR 1.20(c)(1), requester asserts that this request has forty (40) or fewer pages and complies with all other requirements of 37 CFR 1.20(c)(1).
 Payment of the reexamination fee is made by the method set forth below.
 a. ☐ A check in the amount of \$_____ is enclosed to cover the reexamination fee;
 b. ☐ The Director is hereby authorized to charge the reexamination fee
 to Deposit Account No. _____;
 c. ☐ Payment by credit card. Form PTO-2038 is attached; or
 d. ☒ Payment made via USPTO patent electronic filing system.
☐ In addition, the Director is hereby authorized to charge any fee deficiencies to
 Deposit Account No. _____.
5. ☐ Any refund should be made by ☐ check or ☐ credit to Deposit Account No. _____.
 37 CFR 1.26(c). If payment is made by credit card, refund must be to credit card account.
6. ☒ A copy of the patent to be reexamined having a double column format on one side of a separate paper is enclosed. 37 CFR 1.510(b)(4).
7. ☐ CD-ROM or CD-R in duplicate, Computer Program (Appendix) or large table
☐ Landscape Table on CD

[Page 1 of 3]

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0064. Public burden for this form is estimated to average 18 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. If filing this completed form by mail, send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

8. ☐ Nucleotide and/or Amino Acid Sequence Submission
If applicable, items a. – c. are required.
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM (2 copies) or CD-R (2 copies) **or**
- ii. ☐ paper
- c. ☐ Statements verifying identity of above copies.
9. ☒ A copy of any disclaimer, certificate of correction or reexamination certificate issued in the patent is included.
10. ☒ Reexamination of claim(s) 1, 8, 14, 19 is requested.
11. ☒ A copy of every patent or printed publication relied upon is submitted herewith including a listing thereof on Form PTO/SB/08, PTO-1449, or equivalent.
12. ☐ An English language translation of all necessary and pertinent non-English language patents and/or printed publications is attached.
13. ☒ The attached detailed request includes at least the following items:
- a. A statement identifying each substantial new question of patentability based on prior patents and printed publications. 37 CFR 1.510(b)(1).
- b. An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited art to every claim for which reexamination is requested. 37 CFR 1.510(b)(2).
14. ☐ A proposed amendment is included (only where the patent owner is the requester). 37 CFR 1.510(e).
15. ☒ It is certified that the statutory estoppel provisions of 35 U.S.C. 315(e)(1) or 35 U.S.C. 325(e)(1) do not prohibit requester from filing this *ex parte* reexamination request. 37 CFR 1.510(b)(6).
16. Service
- a. ☐ It is certified that a copy of this request (if filed by other than the patent owner) has been served in its entirety on the patent owner as provided in 37 CFR 1.33(c).
- The name and address of the party served are:
- _____
- _____
- _____
- Date of Service: _____
- OR**
- b. ☐ A duplicate copy is enclosed since service on patent owner was not possible. An explanation of the efforts made to serve patent owner **is attached**. See MPEP 2220.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

17. Correspondence Address: Direct all communication about the reexamination to:

☒ The address associated with Customer Number: **178493**

OR

☐ Firm or Individual Name _____
(at the address identified below)

Address

City

State

Zip

Country

Telephone

Email

18. ☐ The patent is currently the subject of the following concurrent proceeding(s):

- a. ☐ Copending reissue Application No. _____
- b. ☐ Copending reexamination Control No. _____
- c. ☐ Copending Interference No. _____
- d. ☐ Copending litigation styled: _____

WARNING : Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

/Kirby Drake/

Authorized Signature

August 15, 2024

Date

Kirby Drake

Typed/Printed Name

55126

Registration No.

☒ For Patent Owner Requester☐ For Third Party Requester

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013). <https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf>

Routine uses of the information in this record may include disclosure to:

- 1) law enforcement, in the event that the system of records indicates a violation or potential violation of law;
- 2) a federal, state, local, or international agency, in response to its request;
- 3) a contractor of the USPTO having need for the information in order to perform a contract;
- 4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record;
- 5) a Member of Congress submitting a request involving an individual to whom the record pertains, when the individual has requested the Member's assistance with respect to the subject matter of the record;
- 6) a court, magistrate, or administrative tribunal, in the course of presenting evidence, including disclosures to opposing counsel in the course of settlement negotiations;
- 7) the Administrator, General Services Administration (GSA), or their designee, during an inspection of records conducted by GSA under authority of 44 U.S.C. 2904 and 2906, in accordance with the GSA regulations and any other relevant (i.e., GSA or Commerce) directive, where such disclosure shall not be used to make determinations about individuals;
- 8) another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c));
- 9) the Office of Personnel Management (OPM) for personnel research purposes; and
- 10) the Office of Management and Budget (OMB) for legislative coordination and clearance.

If you do not furnish the information requested on this form, the USPTO may not be able to process and/or examine your submission, which may result in termination of proceedings, abandonment of the application, and/or expiration of the patent.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Duke Zinser	§
Patent No.:	7,583,191	§ REQUEST FOR <i>EX PARTE</i>
		§ REEXAMINATION
Issued:	September 1, 2009	§
For:	Security system and method for	§
	use of same	§

EX PARTE REEXAMINATION

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF EFS-WEB FILING

Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on August 15, 2024.

/Kirby Drake/
Kirby Drake

**CORRECTED REQUEST FOR *EX PARTE* REEXAMINATION OF
U.S. PATENT NO. 7,583,191**

Patent Owner/Assignee respectfully requests *ex parte* reexamination of U.S. Patent No. 7,583,191 (“the ’191 Patent”) pursuant to 35 U.S.C. §§ 302-307 and 37 C.F.R. § 1.510. The ’191 Patent entitled “Security system and method for use of same” issued on September 1, 2009 and was filed on November 14, 2006 (Exhibit A). The ’191 Patent is still enforceable.

I. Identification of Claims Needing Reexamination

Patent Owner/Assignee requests that claims 1, 8, 14, and 19 be reexamined.

II. Particular Statements Regarding Each Substantial New Question of Patentability

Pursuant to 35 U.S.C. § 303 and 37 C.F.R. § 1.510, the following prior art references

raise a substantial new question of patentability concerning the claims of the '191 Patent:

- U.S. Patent No. 5,428,388 (hereinafter *Von Bauer*) (Exhibit B)
- U.S. Patent Application Publication No. 2004/0080615 (hereinafter *Klein*) (Exhibit C)
- WO 01/93220 (hereinafter *Menard*) (Exhibit D)

In particular, pursuant to 37 U.S.C. § 1.510(b)(1), Patent Owner/Assignee submits the following statement pointing out the substantial new questions of patentability ("SNQP"):

- SNQP 1: Claims 1 and 19 are obvious over *Von Bauer* in combination with *Menard*.
- SNQP 2: Claims 8 and 14 are obvious over *Von Bauer* in combination with *Menard* and *Klein*.

No reference listed above was applied to reject claims, either alone or in combination, during the original prosecution of the '191 Patent.

In the Sections that follow, Patent Owner/Assignee provides summaries of the invention and the prosecution history of the '191 Patent, a discussion of the scope and content of the prior art, and a detailed explanation of the relevance and manner of applying the prior art to every independent claim for which reexamination is requested.

III. The Invention of the '191 Patent

The '191 Patent describes a doorbell monitoring system and a method for doorbell monitoring wherein a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker (*see, e.g.*, Figure 1; Abstract; 2:22-24). An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone (*see, e.g.*, Figure 1; Abstract; 2:24-34). When a person arrives at the entry

point, a control unit relays audio and visual data captured by the video camera and the external microphone to the individual's cellular telephone (*see, e.g.*, Figure 1; Abstract; 2:35-52). Similarly, the control unit relays audio data from the owner to the person at the entry point (*see, e.g.*, Figure 1; Abstract; 2:45-52).

IV. Prosecution History of the '191 Patent (Exhibit E)

The application was filed on November 14, 2006, and assigned U.S. Patent Application No. 11/559,808. A non-final rejection was mailed on November 26, 2008, rejecting claims 1-20. More specifically, claims 1-20 were rejected as being anticipated by U.S. Patent No. 6,778,084 to Chang (hereinafter *Chang*). The applicant filed a response on February 25, 2009, arguing that in *Chang*, the presence of an intruder is detected by actuation of an intrusion device rather than ringing of a doorbell. Further, *Chang* does not work in connection with an everyday, non-emergency event, triggered by a visitor ringing the doorbell. Rather, *Chang* works with emergency, alarm events. The applicant also amended the claims to direct them to a doorbell monitoring system and method rather than a security system and method, adding in limitations reflecting use of a doorbell. A notice of allowance was mailed on May 5, 2009.

V. Scope and Content of the Prior Art

U.S. Patent No. 5,428,388 (hereinafter *von Bauer*) (Exhibit B) is entitled "Video Doorbell System." It was filed June 15, 1992 and issued June 27, 1995, making it prior art. *von Bauer* is directed to a communication apparatus for monitoring sounds and images at a remote location, the apparatus including a monitor station located within the building and a sensor station located at the entranceway.

U.S. Patent Application Publication No. 2004/0080615 (hereinafter *Klein*) (Exhibit C) is entitled "Digital video security system." It was filed August 21, 2003 and published April 29,

2004, making it prior art. *Klein* describes a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.

WO 01/93220 (hereinafter *Menard*) (Exhibit D) is entitled “Modular communication and control system and method.” It was filed May 26, 2000 and published December 6, 2001, making it prior art. *Menard* is directed to a system and method for detecting and monitoring at least one event or condition of interest. The system comprises a sensor and a wireless transmitter and receiver. Upon detection of an event of interest, the sensor communicates that information to the transmitter for communication to the receiver. A module with a sensor can indicate the position of a door coupled to a door opener. A door position sensor coupled to the module provides information to the user over a wireless communication channel.

VI. Detailed Explanation of Manner of Applying Prior Art

SNQP 1: Claims 1 and 19 are obvious over *Von Bauer* in combination with *Menard*.

The combination of *Von Bauer* with *Menard* renders claims 1 and 19 obvious. Attached as Exhibit F is a chart showing where each limitation of independent claims 1 and 19 may be found in the combination of *Von Bauer* and *Menard*.

SNQP 2: Claims 8 and 14 are obvious over *Von Bauer* in combination with *Menard* and *Klein*.

Attached as Exhibit F is a chart showing where each limitation of independent claims 8 and 14 may be found in *Von Bauer* in view of *Menard* and *Klein*.

VII. Conclusion

In view of the foregoing, claims 1, 8, 14, and 19 of the '191 Patent should be reexamined based on the substantial new question of patentability presented in this Request.

Respectfully submitted,

Date: August 15, 2024

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Dallas, Texas 75226
(972)635-0531
E-mail: *kirby@kirbydrakelaw.com*

/Kirby B. Drake/
Kirby B. Drake
Reg. No. 55,126
ATTORNEY FOR APPLICANT



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
90/019,542		7583191	

CONFIRMATION NO. 4697

WITHDRAWAL NOTICE



OC00000077498416

178493
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

Letter Withdrawing Previous Notice/Filing Receipt

Date Mailed: 09/06/2024

Applicant should disregard the Notice mailed on 06/25/2024.

If a new notice (other than a filing receipt) is enclosed, the time period for reply runs from the time period set forth in the new notice. When the new notice is a Notice of Incomplete Reply, the time period of reply continues to run from the date of the notice identified on the Notice of Incomplete Reply. Within the time period for reply, applicant is required to file a reply in compliance with the requirements set forth in the new notice to avoid abandonment of the application. If a new notice is not enclosed, no action is needed at this time. If not included with this letter, a corrected notice and/or an updated filing receipt will be issued in due course.

Registered users of USPTO patent electronic filing system may alternatively submit their reply to this notice electronically. <https://patentcenter.uspto.gov>

For more information about the USPTO patent electronic filing system, please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

If the reply is not filed electronically, the reply must be accompanied by a copy of the new notice.

If the Office previously granted a petition to withdraw the holding of abandonment or a petition to revive under 37 CFR 1.137, the status of the application has been returned to pending status.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/pflewis/



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/019,542	08/15/2024	7583191

178493
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

CONFIRMATION NO. 4697
REEXAM ASSIGNMENT NOTICE



OC000000077502682

Date Mailed: 09/06/2024

NOTICE OF ASSIGNMENT OF REEXAMINATION REQUEST

The above-identified request for reexamination has been assigned to Art Unit 3992. All future correspondence to the proceeding should be identified by the control number listed above and directed to the assigned Art Unit.

A copy of this Notice is being sent to the latest attorney or agent of record in the patent file or to all owners of record. (See 37 CFR 1.33(c)). If the addressee is not, or does not represent, the current owner, he or she is required to forward all communications regarding this proceeding to the current owner(s). An attorney or agent receiving this communication who does not represent the current owner(s) may wish to seek to withdraw pursuant to 37 CFR 1.36 in order to avoid receiving future communications. If the address of the current owner(s) is unknown, this communication should be returned within the request to withdraw pursuant to Section 1.36.

NOTICE OF USPTO EX PARTE REEXAMINATION PATENT OWNER STATEMENT WAIVER PROGRAM

The USPTO has implemented a pilot program where, after a reexamination proceeding has been granted a filing date and before the examiner begins his or her review, the patent owner may orally waive the right to file a patent owner's statement. See *"Pilot Program for Waiver of Patent Owner's Statement in Ex Parte Reexamination Proceedings,"* 75 FR 47269 (August 5, 2010). One goal of the pilot program is to reduce the pendency of reexamination proceedings and improve the efficiency of the reexamination process.

Ordinarily when ex parte reexamination is ordered, the USPTO must wait until after the receipt of the patent owner's statement and the third party requester's reply, or after the expiration of the time period for filing the statement and reply (a period that can be as long as 5 to 6 months), before mailing a first determination of patentability. The USPTO's first determination of patentability is usually a first Office action on the merits or a Notice of Intent to Issue Reexamination Certificate (NIRC).

Under the pilot program, the patent owner's oral waiver allows the USPTO to act on the first determination of patentability immediately after determining that reexamination will be ordered, and in a suitable case issue the reexamination order and the first determination of patentability (which could be a NIRC if the claims under reexamination are confirmed) at the same time.

Benefits to the Patent Owner for participating in this pilot program include reduction in pendency.

To participate in this pilot program, Patent Owners may contact the USPTO's Central Reexamination Unit (CRU) at 571-272-7705. The USPTO will make the oral waiver of record in the reexamination file in an interview summary and a copy will be mailed to the patent owner and any third party requester.

cc: Third Party Requester(if any)

/pflewis/

Legal Instruments Examiner
Central Reexamination Unit 571-272-7705; FAX No. 571-273-9900



UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/019,542	08/15/2024	7583191

178493
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

CONFIRMATION NO. 4697
REEXAMINATION REQUEST
NOTICE



Date Mailed: 09/06/2024

NOTICE OF STREAMLINED REEXAMINATION REQUEST FILING DATE

(Patent Owner Requester)

Requester is hereby notified that the filing date of the request for reexamination is 08/15/2024, the date the required fee was received. (See CFR 1.510(d)).

A decision on the request for reexamination will be mailed within three months from the filing date of the request for reexamination. (See 37 CFR 1.515(a)).

Pursuant to 37 CFR 1.33(c), future correspondence in this reexamination proceeding will be with the latest attorney or agent of the record in the patent file.

The paragraphs checked below are part of this communication:

- ☐ 1. The party receiving the courtesy copy is the latest attorney or agent of record in the patent file.
- ☐ 2. The person named to receive the correspondence in this proceeding has not been made the latest attorney or agent of record in the patent file because:
- ☐ A. Requester's claim of ownership of the patent is not verified by the record.
- ☐ B. The request papers are not signed with a real or apparent binding signature.
- ☐ C. The mere naming of a correspondence addressee does not result in that person being appointed as the latest attorney or agent of record in the patent file.
- ☐ 3. Addressee is the latest attorney or agent of record in the patent file.
- ☐ 4. Other _____

/pflewis/

Legal Instruments Examiner
Central Reexamination Unit 571-272-7705; FAX No. 571-273-9900



UNITED STATES PATENT AND TRADEMARK OFFICE

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90/019,542	08/15/2024	7583191	

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CONFIRMATION NO. 4697

RESEND COVER LETTER



OC00000077503261

Date Mailed: 09/06/2024

COVER LETTER FOR RESENDING CORRESPONDENCE

A courtesy copy of the Notice mailed on 09/06/2024 is enclosed. The time period for reply continues to run from the mail date of that Notice.

A copy of this notice MUST be returned with the reply.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/pflewis/



User Name: PATRICIAVOLPE

Date and Time: Tuesday, September 24, 2024 11:44:00AM EDT

Job Number: 234296464

Document (1)

1. [8:22cv34, Vivint Inc. V. Sb Ip Holdings LLC](#)

Client/Matter: -None-

Search Terms: number(8:22cv34)

Search Type: Natural Language

Narrowed by:

Content Type
Dockets

Narrowed by
-None-

8:22cv34, Vivint Inc. V. Sb Ip Holdings Llc

US District Court Docket
United States District Court, California Central
(Southern Division - Santa Ana)

This case was retrieved on 09/24/2024

Header

Case Number: 8:22cv34
Date Filed: 01/07/2022
Assigned To: Judge David O. Carter
Referred To: Magistrate Judge Douglas F. McCormick
Nature of Suit: Patent (830)
Cause: Fed. Question
Lead Docket: None
Other Docket: 2:23cv06031
Jurisdiction: Federal Question

Class Code: Closed
Closed: 07/27/2022
Statute: 28:1331
Jury Demand: Plaintiff
Demand Amount: \$0
NOS Description: Patent

Participants

Litigants

Vivint Inc.
a Utah corporation |
Plaintiff

Attorneys

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Defendant

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Proceedings

#	Date	Proceeding Text	Source
1	01/07/2022	COMPLAINT Receipt No: ACACDC-32591321 - Fee: \$402, filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6) (Attorney Sterling Arthur Brennan added to party Vivint Inc.(pty:pla))(Brennan, Sterling) (Entered: 01/07/2022)	
2	01/07/2022	CIVIL COVER SHEET filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
3	01/07/2022	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
4	01/07/2022	REPORT ON THE FILING OF AN ACTION Regarding a Patent or a Trademark (Initial Notification) filed by Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
5	01/07/2022	NOTICE of Related Case(s) filed by Plaintiff Vivint Inc.. Related Case(s): 8:22-cv-33 (Brennan, Sterling) (Entered: 01/07/2022)	
6	01/10/2022	NOTICE OF ASSIGNMENT to District Judge Josephine L. Staton and Magistrate Judge Douglas F. McCormick. (ghap) (Entered: 01/10/2022)	

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#	Date	Proceeding Text	Source
7	01/10/2022	NOTICE TO PARTIES OF COURT-DIRECTED ADR PROGRAM filed. (ghap) (Entered: 01/10/2022)	
8	01/10/2022	Notice to Counsel Re Consent to Proceed Before a United States Magistrate Judge. (ghap) (Entered: 01/10/2022)	
9	01/10/2022	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney David R Wright on behalf on Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at caed_attyadm@caed.uscourts.gov . You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (ghap) (Entered: 01/10/2022)	
10	01/10/2022	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney Michael A Manookin on behalf on Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at caed_attyadm@caed.uscourts.gov . You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (ghap) (Entered: 01/10/2022)	
11	01/10/2022	NOTICE OF DEFICIENCIES in Request to Issue Summons RE: Summons Request 3 . The following error(s) was found: The caption of the summons must match the caption of the complaint verbatim. If the caption is too large to fit in the space provided, enter the name of the first party and then write see attached.Next, attach a face page of the complaint or a second page addendum to the Summons. The summons cannot be issued until this defect has been corrected. Please correct the defect and re-file your request. (ghap) (Entered: 01/10/2022)	
12	01/11/2022	ORDER TO REASSIGN CASE due to self-recusal pursuant to General Order 21-01 by Judge Josephine L. Staton. Case transferred from Judge Josephine L. Staton to the calendar of Judge David O. Carter for all further proceedings. Case number now reads as 8:22-cv-00034-DOC-(KESx). (dve) (Entered: 01/11/2022)	
13	01/11/2022	INITIAL STANDING ORDER FOLLOWING ASSIGNMENT OF CIVIL CASE TO JUDGE CARTER upon filing of the complaint by Judge David O. Carter. (kd) (Entered: 01/11/2022)	
14	01/11/2022	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/11/2022)	
15	01/12/2022	21 DAY Summons Issued re Complaint (Attorney Civil Case Opening), 1 as to defendant SB IP Holdings LLC. (twdb) (Entered: 01/12/2022)	
16	01/18/2022	NOTICE of Interested Parties filed by Plaintiff Vivint Inc., identifying Vivint Smart Home, Inc., Blackstone Inc., SkyBell Technologies, Inc.. (Brennan, Sterling) (Entered: 01/18/2022)	

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#	Date	Proceeding Text	Source
17	01/18/2022	APPLICATION of Non-Resident Attorney David R. Wright to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32640616) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order) (Brennan, Sterling) (Entered: 01/18/2022)	
18	01/18/2022	APPLICATION of Non-Resident Attorney Michael A. Manookin to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32640635) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order) (Brennan, Sterling) (Entered: 01/18/2022)	
19	01/21/2022	ORDER by Judge David O. Carter: granting 17 Non-Resident Attorney David R. Wright APPLICATION to Appear Pro Hac Vice on behalf of plaintiff Vivint Inc, designating Sterling A. Brennan as local counsel. (mrgr) (Entered: 01/21/2022)	
20	01/21/2022	ORDER by Judge David O. Carter: granting 18 Non-Resident Attorney Michael A. Manookin APPLICATION to Appear Pro Hac Vice on behalf of plaintiff Vivint Inc, designating Sterling A. Brennan as local counsel. (mrgr) (Entered: 01/21/2022)	
21	02/01/2022	PROOF OF SERVICE Executed by Plaintiff Vivint Inc., upon Defendant SB IP Holdings LLC served on 1/19/2022, answer due 2/9/2022. Service of the Summons and Complaint were executed upon Registered Agent, Corporation Service Company in compliance with Federal Rules of Civil Procedure by personal service. Original Summons returned. (Brennan, Sterling) (Entered: 02/01/2022)	
22	02/09/2022	NOTICE OF MOTION AND MOTION to Dismiss Complaint filed by Defendant SB IP Holdings LLC. Motion set for hearing on 3/21/2022 at 08:30 AM before Judge David O. Carter. (Attachments: # 1 Memorandum, # 2 Proposed Order) (Attorney Aaron Lewis Renfro added to party SB IP Holdings LLC(pty:dft)) (Renfro, Aaron) (Entered: 02/09/2022)	
23	02/10/2022	APPLICATION of Non-Resident Attorney Gary R. Sorden to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32771095) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 02/10/2022)	
24	02/11/2022	APPLICATION of Non-Resident Attorney Brian L. King to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32775254) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 02/11/2022)	
25	02/11/2022	ORDER SETTING SCHEDULING CONFERENCE by Judge David O. Carter. Scheduling Conference set for 3/21/2022 at 08:30 AM before Judge David O. Carter. (kdu) (Entered: 02/11/2022)	
26	02/24/2022	Joint STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 02/24/2022)	
29	02/24/2022	ORDER by Judge David O. Carter, Granting Stipulation. (Motion hearing continued to 4/18/2022 at 08:30 AM before Judge David O. Carter., Scheduling Conference continued to 4/18/2022 at 08:30 AM before Judge David O. Carter.) All proceedings in this action are stayed for thirty days, until March 23, 2022. (twdb) Modified on 2/28/2022 (twdb). (Entered: 02/28/2022)	
27	02/25/2022	Joint STIPULATION to Continue Motion to Dismiss from March 21, 2022 to April 18, 2022 filed by Plaintiff Vivint Inc..(Brennan, Sterling) (Entered: 02/25/2022)	

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#	Date	Proceeding Text	Source
28	02/28/2022	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Documents RE: Stipulation to Continue 27 . The following error(s) was/were found: Proposed Document was not submitted as separate attachment. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (twdb) (Entered: 02/28/2022)	
30	03/28/2022	STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 03/28/2022)	
31	03/28/2022	ORDER by Judge David O. Carter, Granting Stipulation to Continue Stay 30 . The stay of all proceedings in this action is extended for thirty days, until 4/22/22. (Scheduling Conference continued to 5/16/2022 at 08:30 AM before Judge David O. Carter.) (Motion hearing continued to 5/16/2022 at 08:30 AM before Judge David O. Carter.) (twdb) (Entered: 03/29/2022)	
32	03/29/2022	ORDER by Judge David O. Carter: Granting 23 Non-Resident Attorney Gary R. Sorden APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings, LLC, designating Aaron L. Renfro as local counsel. (twdb) (Entered: 03/30/2022)	
33	03/29/2022	ORDER by Judge David O. Carter: Granting 24 Non-Resident Attorney Brian L. King APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings, LLC, designating Aaron L. Renfro as local counsel. (twdb) (Entered: 03/30/2022)	
34	04/21/2022	Joint STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 04/21/2022)	
35	04/22/2022	ORDER by Judge David O. Carter, Granting Stipulation to Continue Stay 34 . The Scheduling Conference set for May 16, 2022, is continued to June 20, 2022. (Motion hearing continued to 6/20/2022 at 08:30 AM before Judge David O. Carter.) (twdb) (Entered: 04/25/2022)	
36	04/25/2022	NOTICE of Appearance filed by attorney Charles S Barquist on behalf of Plaintiff Vivint Inc. (Attorney Charles S Barquist added to party Vivint Inc (pty:pla))(Barquist, Charles) (Entered: 04/25/2022)	
37	04/25/2022	NOTICE of Appearance filed by attorney Christina Le Trinh on behalf of Plaintiff Vivint Inc. (Attorney Christina Le Trinh added to party Vivint Inc (pty:pla))(Trinh, Christina) (Entered: 04/25/2022)	
38	04/26/2022	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Documents RE: Notice of Appearance 37 , Notice of Appearance 36 . The following error(s) was/were found: Incorrect event selected. Correct event to be used is: Notice of Appearance of Withdrawal of Counsel G123.. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (ak) (Entered: 04/26/2022)	
39	05/27/2022	MEMORANDUM in Opposition to NOTICE OF MOTION AND MOTION to Dismiss Complaint 22 filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit A & B)(Barquist, Charles) (Entered: 05/27/2022)	
40	05/27/2022	REQUEST FOR JUDICIAL NOTICE in Support of Plaintiff's Opposition to Defendant's Motion to Dismiss Complaint for Declaratory Judgment filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Barquist, Charles) (Entered: 05/27/2022)	
41	06/06/2022	JOINT REPORT Rule 26(f) Discovery Plan ; estimated length of	

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#	Date	Proceeding Text	Source
		trial 70 hours, filed by Plaintiff Vivint Inc... (Barquist, Charles) (Entered: 06/06/2022)	
42	06/06/2022	APPLICATION of Non-Resident Attorney Hoda Rifai-Bashjawish to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33419084) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Proposed Order) (Renfro, Aaron) (Entered: 06/06/2022)	
43	06/06/2022	REPLY in Support of NOTICE OF MOTION AND MOTION to Dismiss Complaint 22 filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5)(Renfro, Aaron) (Entered: 06/06/2022)	
44	06/08/2022	STRICKEN, see docket entry no. 48 - APPLICATION of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33434352) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Certificate of Good Standing (Supreme Court of Texas), # 2 Certificate of Good Standing (Texas Bar), # 3 Proposed Order) (Renfro, Aaron) Modified on 6/9/2022 (lom). (Entered: 06/08/2022)	
45	06/08/2022	SCHEDULING NOTICE by Judge David O. Carter re: MOTION to Dismiss Complaint 22 Motion is reset for hearing on 7/28/2022 at 08:30 AM before Judge David O. Carter. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (kdu) TEXT ONLY ENTRY (Entered: 06/08/2022)	
46	06/08/2022	ORDER ON APPLICATION OF NON-RESIDENT ATTORNEY TO APPEAR IN A SPECIFIC CASE PRO HAC VICE by Judge David O. Carter. APPLICATION to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC, designating Aaron Lewis Renfro as local counsel. granting 42 Non-Resident Attorney Hoda Rifai-Bashjawish (rolm) (Entered: 06/09/2022)	
47	06/09/2022	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33434352) 44 . The following error(s) was/were found: Proposed Order has not been flattened and is causing a corruption with the filing. (lt) (Entered: 06/09/2022)	
48	06/09/2022	RESPONSE BY THE COURT TO NOTICE TO FILER OF DEFICIENCIES IN ELECTRONICALLY FILED DOCUMENTS RE: APPLICATION of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC 44 by Judge David O. Carter. The document is stricken and counsel is ordered to file an amended or corrected document by June 16, 2022. (lom) (Entered: 06/09/2022)	
49	06/09/2022	APPLICATION of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Previously Paid on 6/8/2022, Receipt No. ACACDC-33434352) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 06/09/2022)	
50	06/13/2022	SCHEDULING NOTICE by Judge David O. Carter Scheduling Conference has been set for 7/28/2022 at 08:30 AM before Judge David O. Carter. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (kdu) TEXT ONLY ENTRY (Entered: 06/13/2022)	
51	06/14/2022	ORDER by Judge David O. Carter: Granting Application of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC, designating Aaron Renfro as local counsel 49 . (lv) (Entered: 06/14/2022)	

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#	Date	Proceeding Text	Source
52	06/16/2022	APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480913) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/16/2022)	
53	06/16/2022	APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480963) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/16/2022)	
54	06/16/2022	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480913) 52 , APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480963) 53 . The following error(s) was/were found: Local Rule 83-2.1.3.3(a) Application not complete: state and/or federal courts to which the applicant has been admitted are not listed. Case information is incomplete. DJ and MJ initials missing on application and proposed order. Please note Order to Reassign Case, dated 1/11/22, Dkt. 13. Other error(s) with document(s): Failed to list state bars where attorney is licensed. (lt) (Entered: 06/16/2022)	
55	06/17/2022	APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 6/16/2022, Receipt No. 33480913) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/17/2022)	
56	06/17/2022	APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 6/16/2022, Receipt No. 33480963) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/17/2022)	
57	07/05/2022	ORDER by Judge David O. Carter: Granting 55 Non-Resident Attorney Jonathan M. Thomas APPLICATION to Appear Pro Hac Vice on behalf of Vivint Inc. Plaintiff, designating Charles S. Barquist as local counsel. (twdb) (Entered: 07/05/2022)	
58	07/05/2022	ORDER by Judge David O. Carter: Granting 56 Non-Resident Attorney Michelle Y. Ku APPLICATION to Appear Pro Hac Vice on behalf of Vivint Inc. Plaintiff, designating Charles S. Barquist as local counsel. (twdb) (Entered: 07/06/2022)	
59	07/14/2022	STIPULATION to Continue Scheduling Conference and Hearing on Defendant's Motion to Dismiss from July 28, 2022 to August 22, 2022 Re: Text Only Scheduling Notice 50 filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Declaration of Gary R. Sorden in Support of Stipulation to Continue Scheduling Conference and Hearing on Defendant's Motion to Dismiss, # 2 Proposed Order)(Renfro, Aaron) (Entered: 07/14/2022)	
60	07/15/2022	Notice of Supplemental Authority in Support of Defendant's Motion to Dismiss Complaint for Declaratory Judgment filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Exhibit A - Memorandum Opinion and Order)(Renfro, Aaron) (Entered: 07/15/2022)	
61	07/27/2022	ORDER GRANTING MOTION TO DISMISS 22 by Judge David O. Carter. The Court GRANTS Defendants Motion and TRANSFERS	

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#	Date	Proceeding Text	Source
		the entirety of this case to the Eastern District of Texas where the related case SB IP Holdings, LLC v. Vivint Smart Home, Inc. et al., No. 4:21-cv-00912-ALM, is already being heard. (MD JS-6. Case Terminated) (rolm) (Entered: 07/27/2022)	
62	07/28/2022	TEXT-ONLY ENTRY - RECEIVED Notice of Receipt of Electronic Case Transfer from Eastern District of Texas, 4:22-cv-00648 filed 7/28/2022. (rolm) (Entered: 07/28/2022)	

Patents

Number	Title	Issued	Class	Subclass
7,193,644	Automated audio video messaging and answering system	03/20/2007	348	14.06
8,139,098	Video communication method for receiving person at entrance	03/20/2012	348	14.06
8,144,183	Two-way audio-video communication method for receiving person at entrance	03/27/2012	348	14.06
8,144,184	Detection and viewing system	03/27/2012	348	14.06
8,154,581	Audio-video communication system for receiving person at entrance	04/10/2012	348	14.06
8,164,614	Communication and monitoring system	04/24/2012	348	14.06

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End of Document



User Name: PATRICIAVOLPE

Date and Time: Tuesday, September 24, 2024 11:43:00AM EDT

Job Number: 234296314

Document (1)

1. 8:22cv33, Vivint Inc. V. Sb Ip Holdings Llc

Client/Matter: -None-

Search Terms: number(8:22cv33)

Search Type: Natural Language

Narrowed by:

Content Type
Dockets

Narrowed by
Case Status: Open,Unknown,Closed

8:22cv33, Vivint Inc. V. Sb Ip Holdings Llc

US District Court Docket
United States District Court, California Central
(Southern Division - Santa Ana)

This case was retrieved on 09/24/2024

Header

Case Number: 8:22cv33
Date Filed: 01/07/2022
Assigned To: Judge David O. Carter
Referred To: Magistrate Judge Karen E. Scott
Nature of Suit: Patent (830)
Cause: Fed. Question
Lead Docket: [8:22cv00034](#)
Other Docket: None
Jurisdiction: Federal Question

Class Code: Closed
Closed: 07/26/2022
Statute: 28:1331
Jury Demand: Plaintiff
Demand Amount: \$0
NOS Description: Patent

Participants

Litigants

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a Utah corporation |
Plaintiff

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Proceedings

#	Date	Proceeding Text	Source
1	01/07/2022	COMPLAINT Receipt No: ACACDC-32591289 - Fee: \$402, filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7) (Attorney Sterling Arthur Brennan added to party Vivint Inc.(pty:pla))(Brennan, Sterling) (Entered: 01/07/2022)	
2	01/07/2022	CIVIL COVER SHEET filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
3	01/07/2022	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
4	01/07/2022	REPORT ON THE FILING OF AN ACTION Regarding a Patent or a Trademark (Initial Notification) filed by Vivint Inc.. (Brennan, Sterling) (Entered: 01/07/2022)	
5	01/07/2022	NOTICE of Related Case(s) filed by Plaintiff Vivint Inc.. Related Case(s): 8:22-cv-34 (Brennan, Sterling) (Entered: 01/07/2022)	
6	01/10/2022	NOTICE OF ASSIGNMENT to District Judge Josephine L. Staton and Magistrate Judge Karen E. Scott. (ghap) (Entered: 01/10/2022)	
7	01/10/2022	NOTICE TO PARTIES OF COURT-DIRECTED ADR PROGRAM filed. (ghap) (Entered: 01/10/2022)	
8	01/10/2022	Notice to Counsel Re Consent to Proceed Before a United States Magistrate Judge. (ghap) (Entered: 01/10/2022)	
9	01/10/2022	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney David R Wright on behalf on Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court	

8:22cv33, Vivint Inc. V. Sb Ip Holdings Lic

#	Date	Proceeding Text	Source
		at cacd_attyadm@caed.uscourts.gov. You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (ghap) (Entered: 01/10/2022)	
10	01/10/2022	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney Michael A Manookin on behalf on Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at cacd_attyadm@caed.uscourts.gov. You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (ghap) (Entered: 01/10/2022)	
11	01/10/2022	NOTICE OF DEFICIENCIES in Request to Issue Summons RE: Summons Request 3 . The following error(s) was found: The caption of the summons must match the caption of the complaint verbatim. If the caption is too large to fit in the space provided, enter the name of the first party and then write see attached.Next, attach a face page of the complaint or a second page addendum to the Summons. The summons cannot be issued until this defect has been corrected. Please correct the defect and re-file your request. (ghap) (Entered: 01/10/2022)	
12	01/11/2022	ORDER TO REASSIGN CASE due to self-recusal pursuant to General Order 21-01 by Judge Josephine L. Staton. Case transferred from Judge Josephine L. Staton to the calendar of Judge David O. Carter for all further proceedings. Case number now reads as 8:22-cv-00033-DOC-(KESx). (dve) (Entered: 01/11/2022)	
13	01/11/2022	INITIAL STANDING ORDER FOLLOWING ASSIGNMENT OF CIVIL CASE TO JUDGE CARTER upon filing of the complaint by Judge David O. Carter. (kd) (Entered: 01/11/2022)	
14	01/11/2022	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff Vivint Inc.. (Brennan, Sterling) (Entered: 01/11/2022)	
15	01/12/2022	21 DAY Summons Issued re Complaint (Attorney Civil Case Opening), 1 as to defendant SB IP Holdings LLC. (twdb) (Entered: 01/12/2022)	
16	01/18/2022	NOTICE of Interested Parties filed by Plaintiff Vivint Inc., identifying Vivint Smart Home, Inc., Blackstone Inc., SkyBell Technologies, Inc.. (Brennan, Sterling) (Entered: 01/18/2022)	
17	01/18/2022	APPLICATION of Non-Resident Attorney David R. Wright to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32640606) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order) (Brennan, Sterling) (Entered: 01/18/2022)	
18	01/18/2022	APPLICATION of Non-Resident Attorney Michael A. Manookin to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 1/18/2022, Receipt No. ACACDC32640630) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order) (Brennan, Sterling) (Entered: 01/18/2022)	
19	01/21/2022	ORDER by Judge David O. Carter: granting 17 Non-Resident Attorney David R. Wright APPLICATION to Appear Pro Hac Vice on behalf of plaintiff Vivint Inc, designating Sterling A. Brennan as local counsel. (mrgo) (Entered: 01/21/2022)	

8:22cv33, Vivint Inc. V. Sb Ip Holdings Llc

#	Date	Proceeding Text	Source
20	01/21/2022	ORDER by Judge David O. Carter: granting 18 Non-Resident Attorney Michael A. Manookin APPLICATION to Appear Pro Hac Vice on behalf of plaintiff Vivint Inc, designating Sterling A. Brennan as local counsel. (mrgo) (Entered: 01/21/2022)	
21	02/01/2022	PROOF OF SERVICE Executed by Plaintiff Vivint Inc., upon Defendant SB IP Holdings LLC served on 1/19/2022, answer due 2/9/2022. Service of the Summons and Complaint were executed upon Registered Agent, Corporation Service Company in compliance with Federal Rules of Civil Procedure by personal service.Original Summons returned. (Brennan, Sterling) (Entered: 02/01/2022)	
22	02/09/2022	NOTICE OF MOTION AND MOTION to Dismiss Complaint filed by Defendant SB IP Holdings LLC. Motion set for hearing on 3/21/2022 at 08:30 AM before Judge David O. Carter. (Attachments: # 1 Memorandum, # 2 Proposed Order) (Attorney Aaron Lewis Renfro added to party SB IP Holdings LLC(pty:dft)) (Renfro, Aaron) (Entered: 02/09/2022)	
23	02/10/2022	APPLICATION of Non-Resident Attorney Gary R. Sorden to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32770908) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 02/10/2022)	
24	02/10/2022	APPLICATION of Non-Resident Attorney Brian L. King to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-32774060) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 02/10/2022)	
25	02/11/2022	ORDER SETTING SCHEDULING CONFERENCE by Judge David O. Carter. Scheduling Conference set for 3/21/2022 at 08:30 AM before Judge David O. Carter. (kdu) (Entered: 02/11/2022)	
26	02/24/2022	Joint STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 02/24/2022)	
27	02/25/2022	Joint STIPULATION to Continue Motion to Dismiss from March 21, 2022 to April 18, 2022 filed by Plaintiff Vivint Inc..(Brennan, Sterling) (Entered: 02/25/2022)	
28	02/28/2022	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Documents RE: Stipulation to Continue 27 . The following error(s) was/were found: Proposed Document was not submitted as separate attachment. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (twdb) (Entered: 02/28/2022)	
29	02/28/2022	ORDER by Judge David O. Carter, Granting Stipulation to Stay Case 26 . All proceedings in this action are stayed for thirty days, until March 23, 2022. (Motion hearing continued to 4/18/2022 at 08:30 AM before Judge David O. Carter.) (Scheduling Conference continued to 4/18/2022 at 08:30 AM before Judge David O. Carter.) (Joint Status Report due by 4/11/2022.) (twdb) (Entered: 03/01/2022)	
30	03/28/2022	STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 03/28/2022)	
31	03/29/2022	ORDER by Judge David O. Carter: Granting 23 Non-Resident	

8:22cv33, Vivint Inc. V. Sb Ip Holdings Llc

#	Date	Proceeding Text	Source
		Attorney Gary R. Sorden APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings, LLC, designating Aaron L. Renfro as local counsel. (twdb) (Entered: 03/30/2022)	
32	03/29/2022	ORDER by Judge David O. Carter: Granting 24 Non-Resident Attorney Brian L. King APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings, LLC, designating Aaron L. Renfro as local counsel. (twdb) (Entered: 03/30/2022)	
33	03/30/2022	ORDER by Judge David O. Carter, Granting Stipulation 30 . The stay of all proceedings in this action is extended for thirty days, until 4/22/22. (Motion hearing continued to 5/16/2022 at 08:30 AM before Judge David O. Carter., Scheduling Conference continued to 5/16/2022 at 08:30 AM before Judge David O. Carter.) RE 22 . (twdb) (Entered: 03/30/2022)	
34	04/21/2022	Joint STIPULATION to Stay Case filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Brennan, Sterling) (Entered: 04/21/2022)	
35	04/22/2022	ORDER by Judge David O. Carter, Granting Stipulation to Stay 34 . The Scheduling Conference set for May 16, 2022, is continued to June 20, 2022. (Motion hearing (ECF 22) continued to 6/20/2022 at 08:30 AM before Judge David O. Carter.) (twdb) (Entered: 04/25/2022)	
36	04/25/2022	NOTICE of Appearance filed by attorney Christina Le Trinh on behalf of Plaintiff Vivint Inc. (Attorney Christina Le Trinh added to party Vivint Inc.(pty:pla))(Trinh, Christina) (Entered: 04/25/2022)	
37	04/25/2022	NOTICE of Appearance filed by attorney Charles S Barquist on behalf of Plaintiff Vivint Inc. (Attorney Charles S Barquist added to party Vivint Inc.(pty:pla))(Barquist, Charles) (Entered: 04/25/2022)	
38	04/26/2022	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Documents RE: Notice of Appearance 37 , Notice of Appearance 36 . The following error(s) was/were found: Incorrect event selected. Correct event to be used is: Notice of Appearance of Withdrawal of Counsel G123.. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (ak) (Entered: 04/26/2022)	
39	05/27/2022	OPPOSITION to NOTICE OF MOTION AND MOTION to Dismiss Complaint 22 filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit A-D)(Barquist, Charles) (Entered: 05/27/2022)	
40	05/27/2022	REQUEST FOR JUDICIAL NOTICE in Support of Plaintiff's Opposition to Defendant's Motion to Dismiss Complaint for Declaratory Judgment filed by Plaintiff Vivint Inc.. (Attachments: # 1 Proposed Order)(Barquist, Charles) (Entered: 05/27/2022)	
41	06/06/2022	JOINT REPORT Rule 26(f) Discovery Plan : estimated length of trial 70 hours, filed by Plaintiff Vivint Inc... (Barquist, Charles) (Entered: 06/06/2022)	
42	06/06/2022	APPLICATION of Non-Resident Attorney Hoda Rifai-Bashjawish to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33418314) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Proposed Order) (Renfro, Aaron) (Entered: 06/06/2022)	
43	06/06/2022	REPLY in Support of NOTICE OF MOTION AND MOTION to Dismiss Complaint 22 filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4)(Renfro, Aaron) (Entered: 06/06/2022)	
44	06/08/2022	APPLICATION of Non-Resident Attorney Rajakumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-	

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#	Date	Proceeding Text	Source
		33433488) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Certificate of Good Standing (Supreme Court of Texas), # 2 Certificate of Good Standing (Texas Bar), # 3 Proposed Order) (Renfro, Aaron) (Entered: 06/08/2022)	
45	06/08/2022	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Rajakumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33433488) 44 . The following error(s) was/were found: Proposed Order has not been flattened and is causing a corruption with the filing. (lt) (Entered: 06/08/2022)	
46	06/08/2022	SCHEDULING NOTICE by Judge David O. Carter re: MOTION to Dismiss Complaint 22 Motion has been reset for hearing on 7/28/2022 at 08:30 AM before Judge David O. Carter. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (kdu) TEXT ONLY ENTRY (Entered: 06/08/2022)	
47	06/08/2022	ORDER ON APPLICATION OF NON-RESIDENT ATTORNEY TO APPEAR IN A SPECIFIC CASE PRO HAC VICE by Judge David O. Carter. APPLICATION to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC, designating Aaron Lewis Renfro as local counsel. granting 42 Non-Resident Attorney Hoda Rifai-Bashjawish (rolm) (Entered: 06/09/2022)	
48	06/09/2022	APPLICATION of Non-Resident Attorney Rajkumar Vinnakota to Appear Pro Hac Vice on behalf of Defendant SB IP Holdings LLC (Pro Hac Vice Fee - \$500 Previously Paid on 6/8/2022, Receipt No. ACACDC-33433488) filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Texas Certificate of Good Standing, # 2 Proposed Order) (Renfro, Aaron) (Entered: 06/09/2022)	
49	06/09/2022	ORDER by Judge David O. Carter: granting 44 48 Non-Resident Attorney Rajkumar Vinnakota APPLICATION to Appear Pro Hac Vice on behalf of SB IP Holdings LLC, designating Aaron L Renfro as local counsel. (lom) (Entered: 06/09/2022)	
50	06/13/2022	SCHEDULING NOTICE by Judge David O. Carter Scheduling Conference has been set for 7/28/2022 at 08:30 AM before Judge David O. Carter. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (kdu) TEXT ONLY ENTRY (Entered: 06/13/2022)	
51	06/16/2022	APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480739) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/16/2022)	
52	06/16/2022	APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480849) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/16/2022)	
53	06/16/2022	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480849) 52 , APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Fee Paid, Receipt No. ACACDC-33480739) 51 . The following error(s) was/were found: Local Rule 83-2.1.3.3(a) Application not complete: state and/or federal courts to which the applicant has been admitted are not listed. Case information is incomplete. DJ and MJ initials missing on	

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#	Date	Proceeding Text	Source
		application and proposed order. Please note Order to Reassign Case, dated 1/11/22, Dkt. 12. Other error(s) with document(s): Failed to list state bars where attorney is licensed. (lt) (Entered: 06/16/2022)	
54	06/17/2022	APPLICATION of Non-Resident Attorney Jonathan M. Thomas to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 6/16/2022, Receipt No. 33480739) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/17/2022)	
55	06/17/2022	APPLICATION of Non-Resident Attorney Michelle Y. Ku to Appear Pro Hac Vice on behalf of Plaintiff Vivint Inc. (Pro Hac Vice Fee - \$500 Previously Paid on 6/16/2022, Receipt No. 33480849) filed by Plaintiff Vivint Inc.. (Attachments: # 1 Exhibit Certificate of Good Standing, # 2 Proposed Order) (Barquist, Charles) (Entered: 06/17/2022)	
56	07/05/2022	ORDER by Judge David O. Carter: Granting 54 Non-Resident Attorney Jonathan M. Thomas APPLICATION to Appear Pro Hac Vice on behalf of Vivint Inc. Plaintiff, designating Charles S. Barquist as local counsel. (twdb) (Entered: 07/05/2022)	
57	07/05/2022	ORDER by Judge David O. Carter: Granting 55 Non-Resident Attorney Michelle Y. Ku APPLICATION to Appear Pro Hac Vice on behalf of Vivint Inc. Plaintiff, designating Charles S. Barquist as local counsel. (twdb) (Entered: 07/05/2022)	
58	07/14/2022	STIPULATION to Continue Scheduling Conference and Hearing on Defendant's Motion to Dismiss from July 28, 2022 to August 22, 2022 Re: Text Only Scheduling Notice 50 filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Declaration of Gary R. Sorden in Support of Stipulation to Continue Scheduling Conference and Hearing on Defendant's Motion to Dismiss, # 2 Proposed Order)(Renfro, Aaron) (Entered: 07/14/2022)	
59	07/15/2022	Notice of Supplemental Authority in Support of Defendant's Motion to Dismiss Complaint for Declaratory Judgment filed by Defendant SB IP Holdings LLC. (Attachments: # 1 Exhibit A - Memorandum Opinion and Order)(Renfro, Aaron) (Entered: 07/15/2022)	
60	07/19/2022	ORDER CONTINUING SCHEDULING CONFERENCE AND HEARING ON DEFENDANTS MOTION TO DISMISS COMPLAINT by Judge David O. Carter. (Motion hearing continued to 8/22/2022 at 08:30 AM before Judge David O. Carter.) (Scheduling Conference continued to 8/22/2022 at 08:30 AM before Judge David O. Carter.) (twdb) (Entered: 07/19/2022)	
61	07/26/2022	MINUTE ORDER IN CHAMBERS by Judge David O. Carter: ORDER CONSOLIDATING ACTION WITH SACV22-00034. The Court SUA SPONTE CONSOLIDATES this action with No. SA CV 22-00034 The Court CONSOLIDATES this case with No. SA CV 22-00034. This case will be administratively closed and all future filings shall be made under No. SA CV 22-00034. The Clerk shall serve this minute order on the parties. Cases associated with Lead Case SACV22-00034. (Made JS-6. Case Terminated.) (twdb) (Entered: 07/26/2022)	
62	01/09/2023	INITIAL STANDING ORDER FOLLOWING ASSIGNMENT OF CIVIL CASE TO JUDGE CARTER. (kdu) (Entered: 01/09/2023)	

Patents

Number	Title	Issued	Class	Subclass
7,193,644	Automated audio video messaging and answering system	03/20/2007	348	14.06

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Number	Title	Issued	Class	Subclass
7,583,191	Security system and method for use of same	09/01/2009	340	541
8,154,581	Audio-video communication system for receiving person at entrance	04/10/2012	348	14.06
8,164,614	Communication and monitoring system	04/24/2012	348	14.06
9,414,030	Communication and monitoring system	08/09/2016	1	1
9,432,638	Communication and monitoring system	08/30/2016	1	1
9,485,478	Communication and monitoring system	11/01/2016	1	1
9,516,284	Communication and monitoring system	12/06/2016	1	1
9,635,323	Communication and monitoring system	04/25/2017	1	1
9,648,290	Communication and monitoring system	05/09/2017	1	1
10,674,120	Communication and monitoring system	06/02/2020	1	1

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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90/019,542

08/15/2024

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178493 7590 09/26/2024
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

EXAMINER

NGUYEN, LINH M

ART UNIT

PAPER NUMBER

3992

MAIL DATE

DELIVERY MODE

09/26/2024

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Order Granting Request For Ex Parte Reexamination	Control No. 90/019,542	Patent Under Reexamination 7583191	
	Examiner LINH M NGUYEN	Art Unit 3992	AIA (FITF) Status No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The request for *ex parte* reexamination filed 08/15/2024 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a) ☐ PTO-892, b) ☒ PTO/SB/08, c) ☐ Other: _____

1. ☒ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

cc:Requester (if third party requester)		

ORDER GRANTING REEXAMINATION REQUEST

A substantial new question of patentability (“SNQ”) affecting claims 1, 8, 14 and 19 of U.S. Patent No. 7,583,191 (“the ‘191 patent”) is raised by the request filed 8/15/2024 (“Request”). The ‘191 patent has an effective filing date prior to 3/16/2013 and will be examined under the pre-AIA first to invent regime. Claims 1, 8, 14 and 19 will be reexamined. Claims 2-7, 9-13, 15-18, and 20 were not requested and will not be reexamined. MPEP 2243.

References Cited as Raising SNQs

US. Patent No. 5,428,388 (“Von Bauer”)

US. Patent Application Publication No. 2004/0080615 (“Klein”)

WO 01/93220 (“Menard”) (Exhibit D)

Prosecution History

The ‘191 patent is drawn to a security system that provides for remote surveillance of an entry way of a property in order to deter potential burglars and other unwanted individuals. A property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone, respectively, to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point. The systems provide a proactive solution of surveillance that deters potential burglars and other unwanted individuals.

The '191 patent was filed as application 11/559,808 with claims 1-20. In a first Office action mailed 11/26/2008, claims 1-20 were rejected as anticipated by Chang et al. In response, applicant amended independent claims 1, 9, 14, and 19 and canceled claim 2. In addition, applicant argues that Chang is directed to notification of intruders. As Chang is directed to detecting and responding to alarm events associated with intruders, Chang does not disclose a doorbell or a doorbell as a trigger as doorbells are for visitors, not intruders. As amended, applicant's independent claims recite a doorbell monitoring system or method that notifies an individual of a doorbell ringing triggered by the ringing of the doorbell. Applicant's claims monitor a doorbell for detecting the presence of visitors. Chang does not work in connection with an everyday, non-emergency event, triggered by a visitor ringing the doorbell. Chang only works with emergency, alarm events. Chang does not mention *a doorbell monitoring system or method having the ringing of the doorbell being a triggering event for communication between a video camera, external microphone and remotely disposed cellular telephone*, and it does not enable these limitations, either expressly or inherently. In response, the examiner issued a notice of allowance on 5/5/2009, which did not include reasons for allowance.

Accordingly, prior art references teaching the following limitations argued by applicant, *a doorbell monitoring system or method having the ringing of the doorbell being a triggering event for communication between a video camera, external microphone and remotely disposed cellular telephone*, would provide a new technical teaching and would have been important to a reasonable examiner in determining patentability, raising an SNQ.

Proposed SNQs

Requester proposes the following SNQs:

1: Claims 1 and 19 are obvious over Von Bauer in combination with Menard.

2: Claims 8 and 14 are obvious over Von Bauer in combination with Menard and Klein.

SNQ 1: Claims 1 and 19 over Von Bauer in combination with Menard

As described in the Request, von Bauer discloses a communication apparatus for monitoring sounds and images at a remote location, the apparatus including a monitor station located within the building and a sensor station located at the entranceway. "Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer." *Von Bauer*, 5:6-18.

Von Bauer further discloses that the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system." *Von Bauer*, 4:28-34.

Von Bauer does not explicitly disclose *cellular* audio communications. Menard discloses module (200) compatible with a wireless communication protocol and operates over both a long range, such as with a cellular telephone, and a short range, such as with BLUETOOTH. A door position sensor coupled to the module (200) provides information to the user over a wireless

communication channel. *Menard*, Abs. 4-6. "Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone." *Menard*, 16:24-26.

Accordingly, the combination of Von Bauer with *Menard* describes the ringing of the doorbell being a triggering event; a video camera and an external microphone disposed in the entry point, the video camera and external microphone, responsive to the triggering event, for capturing entry point visual and audio communications at the entry point and transmitting the captured entry point visual and audio communications. This is the material that was deemed missing from the claims during the original prosecution. The references are also plausibly applied against the claims. The combinations therefore would have been important to a reasonable examiner in considering the patentability of the claims, and an SNQ is raised.

The teachings of these references as discussed in the Request are not cumulative to any written discussion on the record of the teachings of the prior art, were not previously considered nor addressed during a prior examination, and the same question was not the subject of a final holding of invalidity in the Federal Courts.

SNQ 2: Claims 8 and 14 over Von Bauer in combination with *Menard* and Klein.

As described in the Request, von Bauer discloses a communication apparatus for monitoring sounds and images at a remote location, the apparatus including a monitor station located within the building and a sensor station located at the entranceway. "Circuitry included in the sensing station responds to actuation of the doorbell button, or triggering of an optional infrared sensor by the presence of a person near the sensor, to send via radio waves an annunciator signal to a monitoring station within the building. Both visual images of, and voice

transmissions from, the visitor may be sent via the RF link. An RF transceiver within the sensing station also permits voice communications to be sent from a person at the monitoring station and outputted from a loudspeaker in the sensing station, permitting two-way voice conversations between the visitor and monitor viewer." *Von Bauer*, 5:6-18.

Von Bauer further discloses that the invention is to provide a video doorbell system including a telephone interface unit providing a capability for two-way voice communication between the telephone handset and a remote microphone and loudspeaker installation, and for controlling operation of the system." *Von Bauer*, 4:28-34.

Von Bauer does not explicitly disclose *cellular* audio communications. Menard discloses module (200) compatible with a wireless communication protocol and operates over both a long range, such as with a cellular telephone, and a short range, such as with BLUETOOTH. A door position sensor coupled to the module (200) provides information to the user over a wireless communication channel. *Menard*, Abs. 4-6. "Link 225B 25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone." *Menard*, 16:24-26.

Von Bauer and Menard, each does not specifically disclose rendering the least a portion of the captured visual and audio communications at the cellular phone. Klein describes a digital video security system including a video module for rendering video images captured by a video camera and an event scheduling module for generating signals in response to at least one predefined event, where the video module renders the video images in response to a signal generated by the event scheduling module. The predefined event may include a triggering event, such as a motion detection, or a scheduled event, such as a preset date and time.

Accordingly, the combination of Von Bauer with Menard and Klein describes ringing of a doorbell at an entry point; responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point. This is the material that was deemed missing from the claims during the original prosecution. The references are also plausibly applied against the claims. The combinations therefore would have been important to a reasonable examiner in considering the patentability of the claims, and an SNQ is raised.

The teachings of these references as discussed in the Request are not cumulative to any written discussion on the record of the teachings of the prior art, were not previously considered nor addressed during a prior examination, and the same question was not the subject of a final holding of invalidity in the Federal Courts.

Conclusion

Patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any prior or concurrent proceeding involving the patent. See MPEP §§ 2207, 2282 & 2286. Requester may also notify the Office of such proceedings.

All correspondence relating to this *ex parte* reexam proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop *Ex Parte* Reexam
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand to: Customer Service Window

Randolph Building
401 Dulany St.
Alexandria, VA 22314

Papers may also be filed electronically at <https://patentcenter.uspto.gov/>

Any inquiry concerning this communication or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

/LINH M NGUYEN/
Primary Examiner, Art Unit 3992

Conferees:

/JAMES A MENEFEER/
Reexamination Specialist, Art Unit 3992

/H.B.P/
Hetul Patel
Supervisory Patent Reexamination Specialist, Art Unit 3992

<i>Search Notes</i> 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner LINH M NGUYEN	Art Unit 3992

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed patent file, family application files, PTACTS, lit. search	09/12/2024	LMN

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

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Reexamination 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Certificate Date	Certificate Number

Requester Correspondence Address: ☒ Patent Owner ☐ Third Party
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226

LITIGATION REVIEW ☒	LMN (examiner initials)	12 September 2024 (date)
Case Name		Director Initials
8:22cv33, Vivint Inc. V. Sb Lp Holdings Llc (closed)		
8:22cv34, Vivint Inc. V. Sb Lp Holdings Llc (closed)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number			
	Filing Date			
	First Named Inventor	Zinser, Duke		
	Art Unit			
	Examiner Name			
	Attorney Docket Number			

U.S.PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
	1	5428388		1995-06-27	von Bauer			
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
	1	20040080615	A1	2004-04-29	Klein			
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	1	01/93220	WO	A1	2001-12-06	Menard		☐
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor	Zinser, Duke	
Art Unit		
Examiner Name		
Attorney Docket Number		

	1		☐
If you wish to add additional non-patent literature document citation information please click the Add button <input type="button" value="Add"/>			
EXAMINER SIGNATURE			
Examiner Signature	/LINH M NGUYEN/		Date Considered 09/12/2024
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<p>¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.</p>			

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor	Zinser, Duke	
Art Unit		
Examiner Name		
Attorney Docket Number		

CERTIFICATION STATEMENT

Please see 37 CFR 1.97(e) to make the appropriate selection(s):

☐

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- ☐
- See attached certification statement.
- ☐
- A certification statement is not submitted herewith.

FEE

☐

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

COPIES

☒

An identification of an earlier application pursuant to 37 CFR 1.98 (d) (1) is attached.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kirby Drake/	Date (YYYY-MM-DD)	2024-06-19
Name/Print	Kirby Drake	Registration Number	55126

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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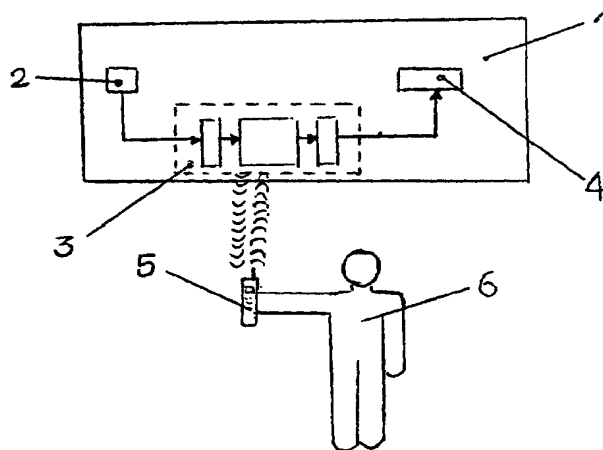
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND DEVICE FOR REMOTE CONTROL AND REMOTE MONITORING VIA SHORT MESSAGE SERVICE



(57) **Abstract:** Information and Remote Control and Administration Method and Device. It uses a mobile phone network SMS (short messages service) service. Features: the user receives to a mobile phone data as SMS messages; data refer to certain parameters from a certain long distance area of interest, through sensors/measuring devices which transmit all measured data from the area of interest to a device for applying the method. The device for applying the method is characterized by a data reception interface, which transforms the received data in digital signals. These signals are locally transmitted to a two way pager (or any other device able to transmit - receive SMS messages). The pager sends SMS messages, through the mobile phone network, according to the loaded program, to the user's mobile phone. The user, using the same mobile phone, can send SMS messages, through the mobile phone network, to the device for applying the method. The above mentioned device controls/commands the devices/plants from the area of interest, through a control interface, according to the instructions contained by the control messages received from the user.



WO 01/65875 A1

METHOD AND DEVICE FOR REMOTE CONTROL AND REMOTE MONITORING VIA SHORT MESSAGE SERVICE

This present invention refers to both the information process and the remote control & administration process, as method and device, based on any mobile phone network' Short Message Service (SMS).

The industrial information and the remote control & administration methods and devices are well known. All of these are generally used in factories, plants, power stations in such purposes as supervising and controlling the industrial processes. These information and remote control & administration methods and devices have the following disadvantages:

- the application area is exclusively an industrial one
- the devices are dedicated by application (especially built for each application)
- the devices are extremely complicated
- all these devices involve high costs

This present invention removes all the disadvantages mentioned above by having universal application, being versatile, being a simple device and easy to be used.

According to this present invention, specific to the information and remote control & administration method and device is the fact that the user receives data from certain parameters which belongs to a certain long distance area of interest, through sensors or measuring devices. These sensors/ measuring devices are transmitting the measured data from that specific area of interest to the information and remote control & administration device. Specific to this device is the fact that it is constituted of one reception interface, one control interface and a two-way pager (or any other device for SMS messages transmission reception) connected to the both above mentioned interfaces. The reception interface has the following functions: to take data from the sensors/ measuring devices, to translate all these information and to send them to the two-way pager. The control interface has the following functions: to take all data from the two-way pager and according to these data to make the command for those devices and plants from the area of interest. The two-way pager has the following functions: to receive data from the reception interface, to give the command to the control interface and to transmit and receive SMS messages to & from the user's mobile phone. In this way, the user has the possibility to be well informed about what is going on in his area of interest and to be able to take action as he likes to, without being actually in the

area of interest. The user can easily do these by transmitting, through his mobile phone, commands, as SMS commands, to the information and remote control & administration device, which controls all the devices & plants from the area of interest. In this way, all the parameters' values of the devices & plants from the area of interest get changed as the user wishes.

The method and the device can be "Information Method and Device" just in case the device used for applying the method is equipped just for transmitting data from the area of interest to the user. In this case, the device doesn't include the control interface and the pager is an one-way pager.

The method and the device can be "Information and Remote Control & Administration Method and Device" just in case the device used for applying the method can administrate the process. In this case the two-way pager is programmed to:

- operate devices & plants from the area of interest, through the control interface, at certain values of the measured parameters;
- transmit all data to the user, in certain conditions according to the program in it, so the user can control the devices & plants from the area of interest as he wishes.

By using devices and usual technologies, this present invention has the following advantages:

- the user is movable, being not tied down to any particularly location;
- all its applications are universal, the personal ones as well as the industrial ones;
- all areas of interest can be easily supervised by the user just using an ordinary mobile phone;
- the user can have as many area of interest as he wishes, by using any number of devices for applying the method he wants to. All these devices are receiving & sending messages from & to only one mobile phone;
- the distance between the areas of interest can be a large one. Distances are depending only on the mobile phone network coverage and its roaming, so the user can use the system from outside his country;
- all commands can be made also from any computer which is connected to the Internet, through any SMS messages site;
- these are very adaptable;
- these have an extensive application area and the user can easily combine the needed fields, as private, industrial, business a.s.o.;
- these are simple and costs are low;
- these are extremely fast in action.

A complete and detailed description of the invention's object can be found below, as the draws no. 1, 2, 3 and 4 picture.

Draw no. 1 pictures a general scheme for achieving the method. This one uses only one sensor or measuring device and control only one device or plant from a single area of interest. It has the following components:

- 1: area of interest
- 2: sensor or measuring device
- 3: device for applying the method
- 4: controlled device or plant
- 5: mobile phone
- 6: user

Draw no. 2 pictures the necessary scheme for building the method application device. It has the following components:

- 7: two-way pager or any other device capable to transmit receive an SMS message
- 8: reception interface
- 9: control interface

Draw no. 3 pictures the general scheme of that method which uses more than one sensors or measuring devices and more than one controlled devices and plants, placed in more than one area of interest.

According to this present invention, the information and remote control method and device are meant for the following purpose: a movable or not user, 6, being placed to any distance away from the area of interest 1, to be able to receive information referring to some certain parameters from that area and also to be able to control certain devices or plants 4, from that area of interest 1, in order to modify the values of those parameters as the user 6 wants.

All values of those parameters are measured by using sensors or measuring devices 2, which are transmitting the measured data to the device for applying the method 3.

The device for applying the method 3 is constituted of: the reception interface 8, a two-way pager 7 (or any other device capable to transmit receive an SMS message) and a control interface 9.

The reception interface 8 is receiving data from the sensors or measuring devices 2 and also is transforming all those data in digital signals which are locally sent to a two-way pager 7 (or any other device capable to transmit receive

an SMS message). The pager is receiving and transforming data, based on the contained program, as SMS messages.

Next the same pager is transmitting the messages through the mobile phone network to the user's 6 mobile phone 5. The mobile phone 5 is noticing and informing the user 6. When the messages are received by the user, he has the possibility to send control messages, as SMS messages, through the mobile phone network, to the device for applying the method 3. This device is receiving the messages through the two-way pager 7 and is transforming these in digital signals. The obtained digital signals are sent to the control interface 9 which is controlling the devices/ plants 4 from the area of interest 1, according to the received messages/ commands from the user 6.

If the user 6 is only informed about what are the changes in the area of interest 1, the method and the device are "Information Method and Device". In this particularly case, the device for applying the method 3 is having only the following components: the reception interface 8 and a one-way pager 7, and it is only transmitting data from the area of interest 1 to the user 6.

The method and the device are "Control Method and Device" if: the user 6 can control devices & plants 4, placed in his area of interest 1; the user is transmitting through his mobile phone 5 control messages as SMS messages, to a device for applying the method 3. The mentioned device for applying the method has the following components: one-way pager 7 (or any other device which can receive SMS messages), which is receiving SMS messages, and a control interface 9, through which it's controlling the devices & plants 4, from the user's 6 area of interest 1, as the user wishes.

The method and the device are "Information and Remote Control & Administration Method and Device" if: inside the device for applying the method 3, the two way pager 7 is programmed to control the devices & plants 4 from the area of interest 1, at certain values of the measured parameters and in certain conditions according to the loaded program, to transmit all data to the user 6, so the user can control as he wishes the devices & plants 4 from the area of interest 1. The area of interest 1 can be any location where from the user wants to receive data/ information. That supposes that the area of interest can be any location where technological process takes place, any machine, any room, any house, any office, any building, any plant, any car a.s.o. The sensors/ measuring devices 2 notice and measure parameters as: the electric current' intensity, the temperature, the pressure, the humidity, fluid flows, the luminosity, the smoke quantity, any motion, any touch, any data transfer a.s.o., generally speaking any parameter which can be measured. Data transmission from the sensors/ measuring devices 2 to the reception interface can be realized by wire as well as wireless (for instance by using infra-red technology, radio waves a.s.o.). The sensor can be a video

camera. In this case, the transmitted data are even images from the area of interest 1, which can be received on the user's mobile phone display 5, as the current technologies facilitate it.

The device for applying the information & remote control method 3 has the following components:

- reception interface 8 – its duties are: receiving the signals from the sensors and measuring devices 2, transforming these signals in digital signals, sending these to the two way pager 7 through a port.
- the two way pager 7 – its duties are: the first main duties category is to receive data from the reception interface 8, to process these data and to send them to the user 6 as SMS messages, according to the contained program. The second main duties category is to receive messages as SMS messages from the user 6 and to control the controlled devices/plants 4 according to their own instructions. The third duties category (an optional one) is to confirm the change of parameters values' as user 6 wanted. If the sensors/ measuring devices 2 or the controlled devices & plants 4 are spread over to a larger area can be used a bigger number of two way pagers. The contained program by the two way pager works in an external computer and can be loaded in the pager's internal flash memory, based on the same procedure the program is loaded into the mobile phone. The two way pagers can be replaced with fixed cellular phones or any other device able to transmit SMS messages in order to avoid the data transmission problems, as SMS messages between pagers and mobile phones, or in order to avoid the two way pagers manufacturing with new technologies. A two way pager can achieve both the information duty and the control duty or it can achieve separately the information duty or the control one (the user 6 can be informed through the pager and control the parameters through another pager). These pagers can achieve also the administration duty, the administration program complexity and its administration capacity as many devices and plants being limited only by the internal memory capacity (in which the above mentioned program is loaded). If the memory isn't large enough, the administration duty can be achieve by a computer which is communicating with the mentioned pager and this one is sending the messages forward.
- the control interface 9 – its duty is to control the controlled devices/plants 4, placed in the area of interest 1, according to the user's messages 6 sent through the two way pager 7. This kind of interfaces (with digital command) is generally used in the industry. A private applications world

- wide can generate these applications' standardization (for the labor saving devices remote control and for lower costs).
- the controlled devices/ plants 4 – their duty is to modify the parameters values from the area of interest 1. These devices can be controlled through the control interface 9. These devices can be: technological/ private devices/ plants for cooling/ heating, illuminating devices, alarm systems, audio video equipment, devices for doors' blocking up, video camera, or any other machine/ device/ plant to which can be adjusted a control interface.
 - the mobile phone 5 – it can be any digital mobile phone which can receive SMS messages. The communication network can be any one that allows the SMS messages transmission: GSM type, satellite transmission a.s.o.
 - the user 6 – is a person and just in case can be a group of persons which share the area of interest or segments of it. In this particularly case some of the used sensors/ measuring devices 2 or some of the used controlled devices/ plants 4 can simultaneous serve, in different combinations, more than one user 6 and being connected to more than one device for applying the method 3. The user 6 will be informed in those ways, events and time stipulated in the program. The user 6 will be able to send control messages according to the specific program mode of operation.

There are few practical samples for the invention' application:

- If in the user's home the temperature lowered too much, the sensor transmits the parameter value to the two way pager; the pager transmits the above mentioned value to the user, as SMS message; the user has the choice to transmit the command to turn on the hitting system or to limit the temperature, as he wishes.
- If in a green house the humidity lowers too much, the parameter value is transmitted to the user which can control the irrigation plants as he wants to.
- The traffic or anybody's presence in certain locations (houses, offices, fields a.s.o.) can be monitoring by simple intimation or by messages or even by images transmission on the user's mobile phone display; if the user notices that the intruders are unknown persons, he can easily activate the alarm/ the doors blocking up device, call the police, go to his area of interest a.s.o.
- Certain equipment/ other devices usage can be monitoring.

- If the water dangerously penetrates into certain spaces, if there is enough light in the area of interest a.s.o.
- Un-hospitalized sick persons and also children home alone can be monitored; for instance if the child home alone wakes up and cries, the noise/ movement sensor informs the user; the user can turn on the lights, turn on the CD player (nice relaxing music) from long distance; in the mean while the video camera, having its certain location, can be activated and able to transmit images to the user's mobile phone display.
- If the user is away (vacation for instance) no matter where in the world but he can receive SMS messages, he can easily find out if an intruder goes in his home, if it is a fire in his home, if it is cold/ hot in his home, if it is a flood in his home a.s.o. and he can take action consequently.
- If the user is away for a certain period of time he can discourage any burglar by remote control the illumination system, the CD player, the TV set a.s.o. every evening so any outsider gets the impression that the user is at home.

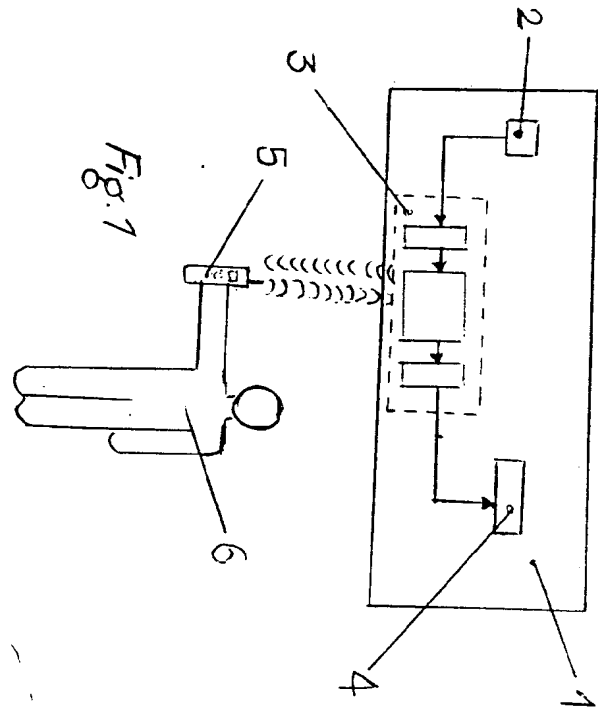
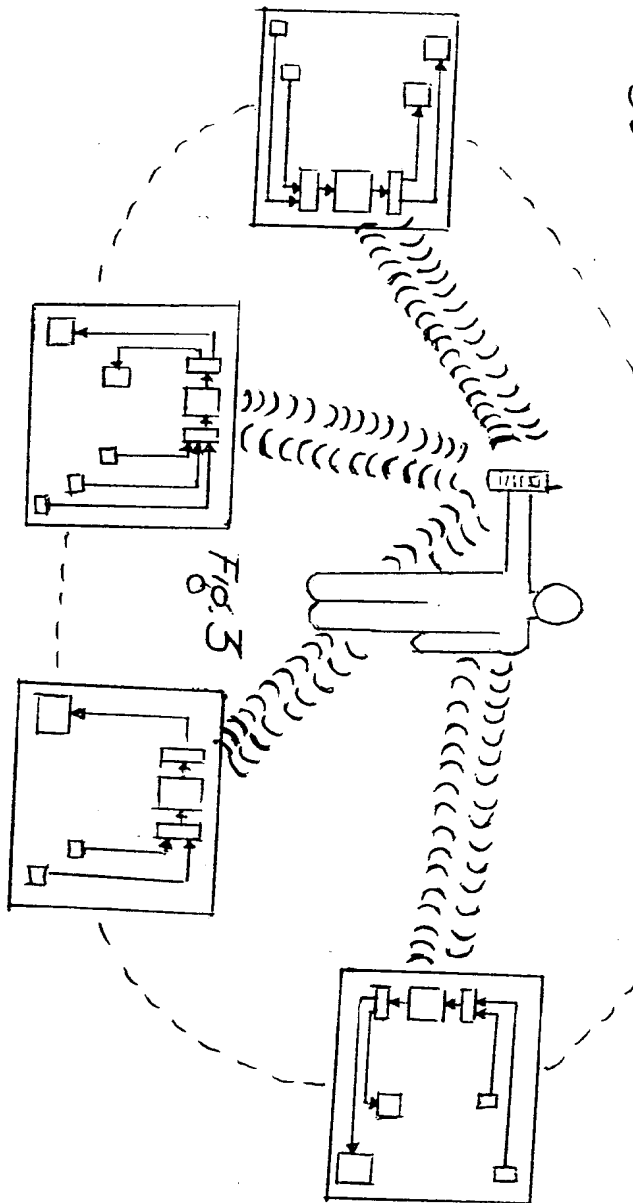
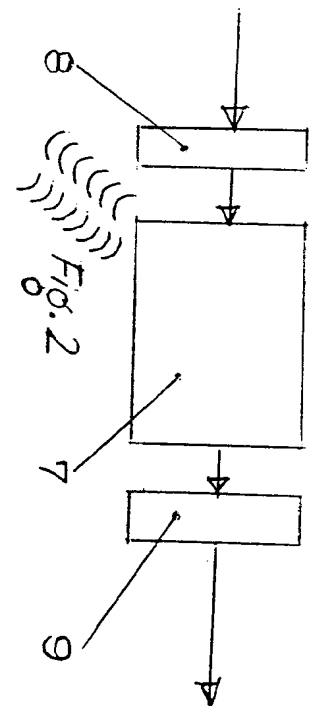
Practically, the user decides what are the purpose, the way and the configuration in which he uses the information and remote control & administration method and device. The location where from the above mentioned device and method can be used is practically world wide. For particularly isolated locations can be accessed the satellite mobile phone service.

CLAIMS

1. Information and Remote Control & Administration Method and Device. It uses a mobile phone network SMS (short messages service) service. Features: the user 6 receives to a mobile phone 5 data as SMS messages; data refer to certain parameters from a certain long distance area of interest 1, through sensors/ measuring devices 2 which transmit all measured data from the area of interest 1 to a device for applying the method 3. The device for applying the method is characterized by a data reception interface 8, which transforms the received data in digital signals. These signals are locally transmitted to a two way pager 7 (or any other device able to transmit - receive SMS messages). The pager sends SMS messages, through the mobile phone network, according to the loaded program, to the user's 6 mobile phone 5. The user, using the same mobile phone 5, can send SMS messages, through the mobile phone network, to the device for applying the method 3. The above mentioned device controls/ commands the devices/ plants 4 from the area of interest 1, through a control interface 9, according to the instructions contained by the control messages received from the user 6.

2. Long Distance Information Method and Device. It uses a mobile phone network SMS (short messages service) service. Features: the user 6 receives long distance data. Data refer to certain parameters from a user's certain area of interest 1. Data are collected using sensors/ measuring devices 2, which transmit the measured data from the area of interest 1 to the device for applying the method 3. The device for applying the method is characterized by a data reception interface 8, which transforms the received data in digital signals. These signals are transmitted to a one way pager 7 (or any other device able to transmit SMS messages). The pager sends SMS messages, through the mobile phone network, according to the loaded program, to the user's 6 mobile phone 5, so the user gets informed about parameters' values from the area of interest.

3. Remote Control Method and Device. It uses a mobile phone network SMS (short messages service) service. Features: the user 6 can control/ command devices/ plants 4, placed in a certain area of interest 1 of his. To achieve the control, the user sends the command as SMS messages, through his mobile phone 5, to the device for applying the method 3. The device for applying the method is characterized by a one way pager 7 (or any other device able to receive SMS messages), which receives the SMS messages, and a control interface 9, through which the devices/ plants 4 from the user 6 area of interest 1 are controlled/ commanded, as the user wishes.



2/2

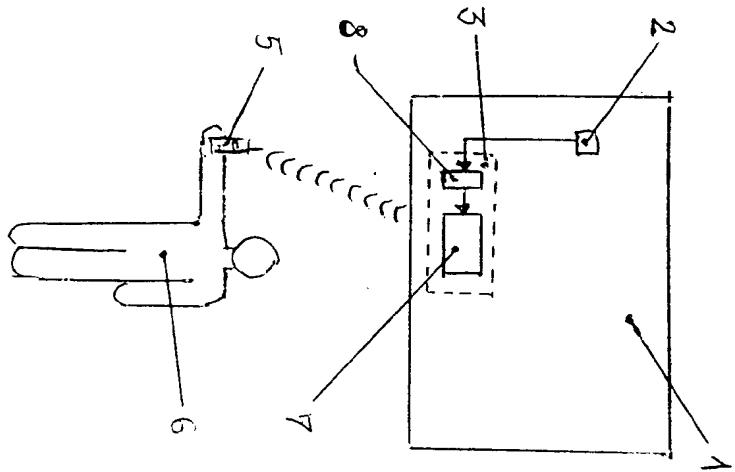


Fig. 4

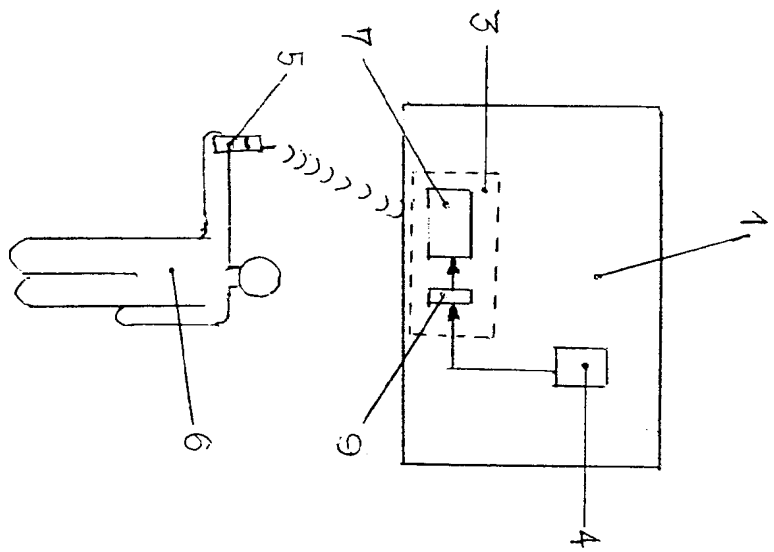


Fig. 5

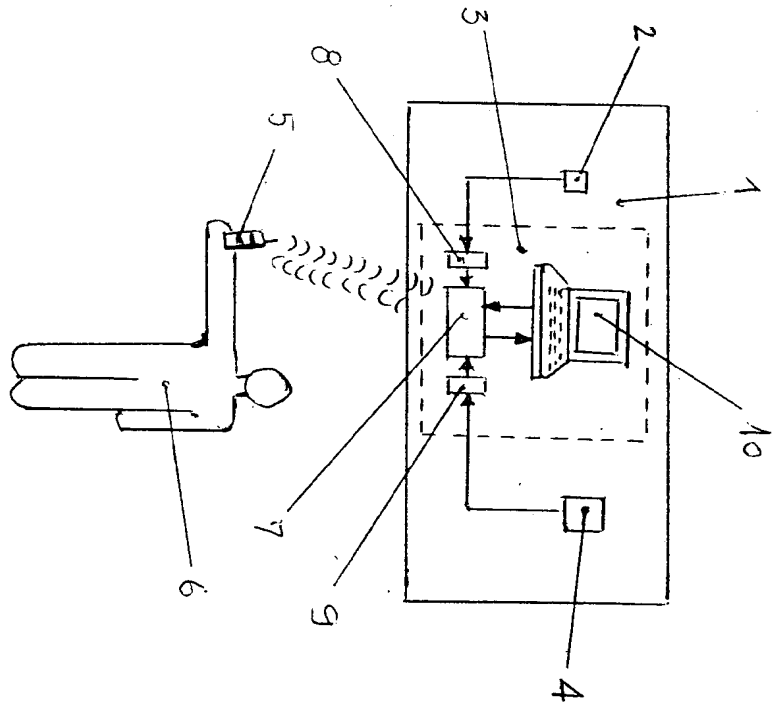


Fig. 6

INTERNATIONAL SEARCH REPORT

Internat Application No

PCT/RO 00/00007

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04Q7/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 930 792 A (NOKIA MOBILE PHONES LTD) 21 July 1999 (1999-07-21) column 11, line 16 -column 14, line 46 ----	1-3
X	WO 99 49680 A (WARFEL KARL B ;SHAND ARTHUR M (US); WHITLEY KEVIN T (US); BELLSOUT) 30 September 1999 (1999-09-30) page 7, line 26 -page 9, line 25 page 11, line 22 -page 13, line 9 ----	1
X	EP 0 417 944 A (NOKIA MOBILE PHONES LTD) 20 March 1991 (1991-03-20) column 3, line 26 -column 4, line 44 -----	2



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

27 October 2000

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Name and mailing address of the ISA

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Pham, P

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/RO 00/00007

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0930792	A	21-07-1999	FI	980115 A	21-07-1999
WO 9949680	A	30-09-1999	AU	3201599 A	18-10-1999
EP 0417944	A	20-03-1991	FI	894370 A	16-03-1991
			AT	121035 T	15-04-1995
			DE	69018550 D	18-05-1995
			DE	69018550 T	14-12-1995
			JP	3112751 A	14-05-1991

Patents

kr 2001-0084277



Remote security system for coming and out

Abstract

PURPOSE: A remote exit and entrance security system is provided to automatically connect a cellular phone in case that a visitor calls, embody a bidirectional conversation using an audio/video transmitting and receiving function of the cellular phone, and confirm the visitor in a remote space to permit and control the exit and entrance. **CONSTITUTION:** A visitor outdoor terminal(100) having a camera(110), an LCD(120), a speaker(130), a microphone(140), and various operating buttons(150) embodies the call of a visitor and an audio and video conversation and remotely controls a door alarm system and a door lock device by a control through a cellular phone of a user or a user indoor terminal(200). The user indoor terminal(200) performs an audio and video bidirectional communication with the visitor outdoor terminal(100) by the call of the visitor outdoor terminal(100), automatically connects the cellular phone and the visitor outdoor terminal(100) when calling the visitor, and controls the confirmation of the visitor, the communication, and a door open/close through the cellular phone.

KR20010084277A

South Korea

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Other languages: Korean

Inventor: 손재철

Worldwide applications

2000 KR

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2000-02-24 Application filed by 손재철

2000-02-24 Priority to KR10-2000-0009172A

2000-03-03 Priority to KR200000005938U

2001-09-06 Publication of KR20010084277A

2003-03-04 Application granted

2003-03-04 Publication of KR100373449B1

Info: Cited by (32), Legal events, Similar documents, Priority and Related Applications

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Claims (5)

Hide Dependent
translated from Korean

It is installed in the door, camera 110, liquid crystal display 120, speaker 130, microphone 140, and various operation buttons 150, etc. are provided for the visitor to make a voice video call. A visitor outdoor terminal 100 for remotely controlling the door alarm system and the door lock device by controlling the user through a mobile phone or an indoor terminal, Interphone function by two-way communication between voice and video by the call of the outdoor terminal 100, and when the visitor calls according to the selection, the mobile phone and the outdoor terminal 100 are automatically connected and the visitor is confirmed and communicated through the mobile phone. And remote access security system comprising a user terminal 200 for controlling the door opening / closing. The method of claim 1, wherein the outdoor terminal 100, A camera 110 for capturing an image of a visitor, an indoor terminal 200, a liquid crystal display 120 for displaying a pre-stored image or text message, a speaker 130 for making a voice call, and a microphone 140. , A menu / guide key 151 for selecting to display a menu and a guide message of the outdoor terminal 100, a number input key 152 for number input, a call key 153 for indoor call or mobile phone call, and the like. By controlling the entire operation of the provided operation button 150, the outdoor terminal 100 is connected to the indoor terminal 200 when the call button is input, the message output and voice calls are realized, the indoor terminal 200 Control unit 160 to decode the information input through the alarm control device 10 and the locking / opening control of the door lock device 20, between the control unit 160 and the indoor terminal 200 To serial communication unit 170 for communication Remote access security system, characterized in that configured. The method of claim 1, wherein the indoor terminal 200, The outdoor terminal 100 and the camera 210 for bidirectional image transmission, the liquid crystal display 220 for displaying images and text messages transmitted from the outdoor terminal 100, and a speaker / microphone for a voice call (230, number input keys 241, direct dialing key 242 of the mobile phone automatic connection, direct dialing key 243 of the indoor control and automatic cell phone connection, the dedicated key 244 for the indoor image connection, emergency and various conveniences The operation button 240 having the comprehensive keys 245 for the function and the overall operation of the indoor terminal 200 are connected to connect the voice and video conversation with the outdoor terminal 100 and the outdoor by selecting a mobile phone connection function. When the terminal 100 is called, the user terminal and the outdoor terminal 100 are automatically connected to each other and the control signal of the door lock device 20 and the alarm device 10 is selected by the selection of the mobile phone or the function button. The control unit 260 to output to And a serial communication unit (270) for communication connection between the control unit (260) of the indoor terminal (200) and the outdoor terminal (100). According to claim 1, The remote access security system, Further comprising a server system connected via the Internet under the control of the indoor terminal 200, The server system configures a program to enable a data communication connection to the indoor terminal 200, or installs a communication modem to connect to the server system, and automatically connects an e-mail or phone call with a user ID through the server system when a visitor calls. (Internet phone) can be configured to automatically send the visit history information (image and voice) and emergency monitoring situation information for the visitor to record and manage in the server system, the user through the server system website to the outdoor Remote access security system, characterized in that configured to control the video and voice calls and access control with the terminal (100). According to claim 1, The remote access security system, The indoor terminal 200 is connected to a plurality of surveillance cameras for surrounding surveillance, and receives image information from the plurality of surveillance cameras and the camera 110 of the outdoor terminal 100 when the alarm signal of the alarm device 10 is detected. Remote access security system, characterized in that the automatic transmission to the user's mobile phone or Internet server system, and if the alarm is not released for a certain period of time to automatically connect to the preset security center or government office to transmit the video and audio signals .

Description

translated from Korean

Remote security system for coming and out

The present invention relates to a remote access security system, and more particularly, to a remote access security system that enables remote access monitoring using a mobile phone voice / video transmission / reception function using a mobile phone terminal.

In general, remote control security is required for access to venture offices, factory development rooms, and corporate boardrooms where security is important. However, there are no people in the office because employees cannot always reside in the office. In this case, a security method is required.

By the way, in the conventional security method, the method which allows access only when carrying a key using a normal locking device, the method using an access card, etc. are used. In the case of using a key or an access card, there are disadvantages such as tampering with the key or an access card, and when a large number of access cards are provided, it is impossible to know who entered. In particular, in the case of providing a large number of access cards, access is restricted because of security loopholes.

However, in case of leaving the office after work or holiday, if the lock is locked for access control, even if urgent matters occur, it is not possible to enter without the person holding the access card or key. There was also a disadvantage that could not be known.

Therefore, in the present invention, when a visitor calls by using a voice / video transmission / reception function of the mobile phone, the mobile phone automatically realizes a two-way conversation and remotely accesses a person who can check the accessor and permit / control access at a remote place. It is to provide a security system.

In addition, the present invention is automatically connected to the server system via the Internet to enable the user to have a video / voice chat with the visitor on the website, and to control access control, visit history information such as video / voice messages of the visitor. It automatically updates the server system so that the user can check it on the website from time to time, and the user can record / modify / delete messages for delivery to the visitor through the Internet.

The present invention is installed on the door of the office, such as the security of the entrance and the like, and equipped with a camera, a liquid crystal display screen, a speaker, a microphone and various operation buttons to call visitors and realize a voice video call and a visitor outdoor terminal and ; It displays the visitor image taken by the outdoor terminal and connects the voice / video call, and automatically connects the opening / closing and control of the door and the voice / video communication with the user's mobile phone when the visitor calls. It consists of a user indoor terminal for two-way communication between the mobile phone and the remote.

The present invention is a remote control security system that enables a voice / video two-way conversation with a visitor remotely by automatically connecting a telephone to a user's (access control) mobile phone when the visitor calls.

In addition, the present invention allows a user to leave a message in advance using a mobile phone in the system so that the message is automatically displayed on the LCD screen when the visitor presses a call button.

In addition, the present invention is a multi-media remote security control system for the image taken by the camera is transmitted to the user's indoor terminal in a short distance and the image is signaled so that the user can check and control (open or close) the situation of the installation space as an image if necessary To provide.

In addition, when an intruder enters the entrance space where the system is installed, the video information of the intruder recorded by the surveillance camera automatically calls the user's mobile phone to indicate that the intruder is in the space, and the video information of the site is displayed on the user's mobile phone. do. This signal is simultaneously transmitted to an adjacent police box. In addition, all access items generated in the absence of the user are automatically transmitted to the user's main server computer so that moving image information is recorded.

- 1 is a block diagram of a remote access monitoring system according to the present invention;
- 2 is an external configuration diagram of an outdoor terminal according to the present invention;
- 3 is a front panel configuration diagram of an indoor terminal according to the present invention;
- 4 is an explanatory diagram of a visitor access permission according to the present invention;
- 5 is an explanatory diagram of a remote conversation between a visitor and a user according to the present invention;
- 6 is an explanatory diagram of a remote voice / video call between a visitor and a plurality of users according to the present invention;
- 7 is an explanatory diagram of an interphone function between an inventor and an indoor user according to the present invention;
- 8 is an explanatory diagram of a real-time remote monitoring function by moving picture transmission and reception according to the present invention;
- 9 is an explanatory diagram of a voice / image automatic transmission function when an emergency occurs according to the present invention.

Explanation of symbols on the main parts of the drawings

- 10: alarm device
- 20: door lock device
- 100: outdoor terminal
- 110, 210: Camera
- 120, 220: liquid crystal display
- 130: speaker
- 140: microphone
- 150, 240: Operation button
- 160, 260: control unit
- 170, 270: serial communication unit
- 200: indoor terminal

230: Speaker / Microphone

300: telephone

Hereinafter, exemplary embodiments of the present invention will be described in detail with reference to the accompanying drawings.

1 is a configuration diagram of a remote access monitoring system according to the present invention, which is installed in the door as shown in the camera 110, the liquid crystal display 120, the speaker 130, the microphone 140 and various operation buttons (150, etc., such that the visitor calls and realizes a voice video call, and the visitor outdoor terminal 100 to remotely control the door alarm system and the door lock device by controlling the user's mobile phone or indoor terminal.)Wow; Voice and video two-way communication with the outdoor terminal by the call of the outdoor terminal 100, and automatically connects the mobile phone and the outdoor terminal 100 when the visitor calls, optionally confirming the visitor and communication and opening the door / It is composed of a user indoor terminal 200 for controlling the closing.

2 is an external configuration diagram of an outdoor terminal according to the present invention, and FIG. 3 is a front panel configuration diagram of an indoor terminal according to the present invention.

The outdoor terminal 100 may include a camera 110 for capturing an image of a visitor, an indoor terminal 200, a liquid crystal display 120 for displaying a pre-stored image or text message, a speaker for making a voice call (130 and the microphone 140, a menu / guide key 151 for selecting to display a menu and a guide message of the outdoor terminal 100, a number input key 152 for number input, an indoor call or a mobile phone call Control button 150 is provided with a call key 153 for the control, and the overall operation of the outdoor terminal 100 to connect to the indoor terminal 200 when the call button is input, the message output and voice calls The control unit 160 for realizing and decoding the information input through the indoor terminal 200 to control the alarm of the alarm device 10 and the lock / open control of the door lock device 20, and the control unit 160.) And the indoor terminal 200 For it consists of a serial communication unit 170.

The indoor terminal 200 may include an outdoor terminal 100, a camera 210 for bidirectional image transmission, a liquid crystal display 220 for displaying images and text messages transmitted from the outdoor terminal 100, and the like. , Speaker / microphone 230 for voice calls, number input keys 241, direct connection key 242 for mobile phone, direct key 243 for indoor control and mobile phone, and dedicated key for indoor video connection 244, an operation button 240 having comprehensive keys 245 for emergency and various convenient functions, and overall operation of the indoor terminal 200 to control voice and video conversation with the outdoor terminal 100. And automatically connects the user's mobile phone with the outdoor terminal 100 when the outdoor terminal 100 is called by selecting a mobile phone connection function and the door lock device 20 and the alarm device 10 by selecting a mobile phone or a function button.) To the outdoor terminal 100 And a serial communication unit 270 for communication connection between the control unit 260 for outputting the control unit 260 of the indoor terminal 200 and the outdoor terminal 100.

The liquid crystal display unit 120 or 220 is configured to display an input message and a transmission / reception state, display an input message, display an outgoing character or image image, and the camera 110 or 210. Image input for image connection between the user and the indoor user, the menu / guide key 151 of the outdoor terminal 100 functions to guide the menu to be input, the menu and the guidance message is stored in advance by the controller 160 The guide menu will be displayed.

Meanwhile, the present invention may be configured to connect the indoor terminal 200 to a server system so as to control the outdoor terminal 100 and communicate with the outdoor terminal 100 at a website. That is, the program is configured to enable a data communication connection through the telephone to the indoor terminal 200, or a communication modem is installed to connect to the server system, and when a visitor calls, automatically connects to an e-mail or a telephone with a user ID through the server system. It is configured to be able to (Internet Phone) to automatically send visit record information (image and voice) and emergency monitoring situation information about visitor to record and manage in server system. Accordingly, a user who is permitted to use the information about the remote access security system of the present invention by connecting to the server system can check from time to time, and also store a delivery message to transfer images and messages to the outdoor terminal 100. You can.

Referring to the function of the present invention configured as described above by function as follows.

First, the outdoor terminal 100 is installed as a normal outdoor interphone, and the indoor terminal 200 is installed as an indoor interphone. The indoor terminal 200 may be configured as an integrated set with a telephone like a conventional indoor interphone, and may be configured to be controlled by a call by connecting the telephone externally.

<Remote chat function>

When the visitor presses the call button of the outdoor terminal 100, the call request of the outdoor terminal 100 is transmitted to the indoor terminal 200, and the indoor terminal 200 makes a call connection to the mobile phone by a preset mode. That is, when the function button is selected in the indoor terminal 200 and the automatic cell phone connection key is selected, when the call button of the outdoor terminal 100 is pressed, the indoor terminal 200 automatically calls a preset cellular phone number. Attempt to connect. Telephone connection is controlled by the phone control and call control unit 250, the phone 300 through the phone 300 through the phone 300 to connect the call path with the mobile phone so that visitors can see the voice and the outdoor terminal 100 Connect images. Here, the video call is not possible with the current mobile phone, but when the IMT2000 business is commercialized in the future and the video communication using the mobile phone is possible, voice and video communication between the outdoor terminal 100 and the mobile phone is possible.

<Remote control function of entrance>

When the visitor presses the call button of the outdoor terminal 100 and is connected to the user, the user can remotely control the entrance and exit of the door using a mobile phone. This allows the user to enter a predetermined password using a mobile phone and control access approval by the password. The password or alarm device and the door lock device control command input through the mobile phone decode the password and the alarm and the door lock control command transmitted from the mobile phone by the outdoor terminal 100 or the indoor terminal 200 to the alarm device through the outdoor terminal 100. 10 or the door lock device 20 is controlled.

The alarm device 10 may be an alarm device using a conventional magnetic sensor or an alarm device using an optical sensor or an alarm device using a sensor for detecting breakage or impact. In the present invention, the outdoor terminal 100 may be used. Controls the operation of the alarm device 10 described above. That is, the alarm release signal is input to the main controller of the alarm device.

Similarly, the door lock device 20 may use a door lock device that can control whether the lock is controlled by an external electric signal. A door lock device that can be locked and released using a conventional motor or a solenoid may be used. In the outdoor terminal 100 outputs the door lock lock or release signal of the door lock device 20 to control the door lock device 20.

<Message display function>

The outdoor terminal 100 according to the present invention may express a message left by the user. The message input can be input by the user through the mobile phone or the indoor terminal 200, and when using the indoor terminal 200, using the function key and the number input key to enter a text message in the same manner as the text message input method in the mobile phone. The display method of the input message may be automatically displayed when the call button is pressed on the outdoor terminal 100, and when the call button is pressed, the liquid crystal display 120 may notify the user of the message. There is a way to display the logo so that the message can only be checked when the password is entered. When checking the message by entering a password, the message is delivered only to a person who knows the password. This can be useful when providing a message to be delivered only to a family when installed in a normal home.

<Real-time on-site monitoring function by sound / video>

When a user makes a telephone connection to a phone built in or external to the indoor terminal 200 or when the user makes a connection with the user's mobile phone and the outdoor terminal 100 by a call of the outdoor terminal 100, the outdoor terminal 100 is installed. The camera 110, the microphone 140, and the speaker 130 are driven to enable a voice call, and transmit the image captured by the camera 110 to the mobile phone in real time. This moving picture real-time transmission may allow the controller to process and transmit the image of the camera 110, which is the controller of the indoor terminal 200 to process the video signal in the same manner as the Internet phone (video phone) of the PC mobile phone. It is achieved by transmitting a video to the home, it can be more easily achieved by configuring the indoor terminal 200 as a home automation device that combines voice / video call and various control functions by connecting to a PC.

<Automatic alarm handling operation function in emergency>

When an intruder occurs or an intruder enters due to an inappropriate access method, an alarm signal is received from the alarm device 10 of the outdoor terminal 100, and the outdoor terminal 100 is emergency to the indoor terminal 200 by the alarm signal. The alarm signal is transmitted, and the indoor terminal 200 automatically connects to a predetermined user's mobile phone and transmits real-time sound and video data. In addition, depending on the alarm status, it can be automatically connected to a nearby police box or private security company branch, which transmits emergency signals and audio video data in real time, which activates a timer after an emergency alarm signal is generated. If the user fails to respond or needs to report according to the situation, the indoor terminal 200 automatically connects to the police box or police company using the telephone to report after a predetermined time.

<Multi control function>

According to the present invention, a mobile phone number of one person or all users in a space may be entered to make a message or a real-time connection to all users' mobile phones when the visitor visits. This is because the indoor terminal 200 enables a multi-telephone connection. Set to service one multiple connection, when the outdoor terminal 100 is called, the indoor terminal 200 attempts to make a telephone call using a predetermined multiple connection number, and recognizes the multiple connection on the exchange side of the telecommunication company automatically. Service multiple connections. In this case, the indoor terminal 200 may control the opening of the door when all are approved through the access approval procedure from the multiple connected mobile phones. When the multi-connection function is set as described above, messages and moving picture data can be transmitted in real time to all the multi-connected users who are set in an emergency.

<General Interphone Function>

When there is a user indoors, the indoor terminal 200 and the outdoor terminal 100 may be operated by a general interphone function, and when the visitor presses a call button, the outdoor terminal 100 is placed on the liquid crystal display 220 of the indoor terminal 200. The camera 110 of the) expresses the image taken and the voice conversation through the speaker / microphone is possible, it is possible to control the door opening by pressing the entrance approval button. The speaker / microphone 230 of the indoor terminal 200 may be used as a handset of a telephone, and may be separately provided to operate in the same function as a speakerphone of a general interphone or a telephone.

<Occurrence data occasional update function>

The present invention can update the moving picture, input data, sound, etc. whenever the data is updated, that is, when the visitor enters or the intruder penetrates the automatic e-mail to the designated computer of the company.

4 is an explanatory diagram of a visitor access permission according to the present invention, when a visitor enters a designated password using a number input key of an outdoor terminal 100 and presses a call button, the indoor terminal 200 is a user. A message (text-password) is automatically sent to the mobile phone of the user, and when the user reads the received message and presses a button designated for approval through the mobile phone owned by the user, a signal is automatically sent and the door is opened. In this case, when the visitor presses the menu / information key, the user will be prompted for access and a user call, and if there is a password that allows the visitor to know whether the visitor is an authorized visitor, the user can enter the password so that the user Check who you are so you can approve access.

<Call and record check function with visitor using internet>

Configure the system to enable the data communication connection to the indoor terminal 200,

It connects to the server system through the phone and automatically transmits the visit history information (image and voice) and emergency monitoring situation information about the visitor to record, store and manage in the server system. Accordingly, a user who is permitted to use the information about the remote access security system of the present invention by connecting to the server system can check from time to time, and store a delivery message to transmit images and messages to the outdoor terminal 100. You can.

In addition, when a visitor calls the indoor terminal 200 to the server system automatically when the visitor sends the video and audio of the visitor, the server system automatically connects to the user's mobile phone or Internet phone or e-mail, and the user automatically connects to the PC. During the work, it is possible to make a video / voice call with the visitor through telephone or PC communication, and to control access approval. In other words, the present invention can be connected to the user's PC in the same way as the mobile phone connection to control the access from the Web site through the PC.

5 is an explanatory diagram of a remote conversation between a visitor and a user according to the present invention.

When the visitor presses the call button of the outdoor terminal 100, the visitor is automatically connected to the mobile phone of the designated user, and the long distance voice / video conversation with the visitor is possible. You can also remotely open and close doorways as needed during or after a conversation. It is also possible to talk to a single person, or even a whole number of users (i.e., multiple users who control access).

6 is a remote voice / video call explanatory diagram between a visitor and a plurality of users according to the present invention

When the visitor presses the call button of the remote access security system of the present invention, the visitor's video and audio are automatically connected to the designated user's mobile phone among the actual users of the space, and the camera and microphone attached to the top of the outdoor terminal 100 are used. Delivered to the user's mobile phone. In addition, the user's voice and image are also displayed on the speaker and the liquid crystal display installed in the system. After such a long distance voice / video call with the visitor, the space may be opened and closed by clicking on the approval button of the user. It is possible to talk to a single person or sometimes a whole number of users.

7 is an explanatory diagram of an interphone function between an inventor and an indoor user according to the present invention.

When there is a user in the room, when the visitor presses the call button, the visitor's image is displayed on the liquid crystal display 220 of the indoor terminal 200, and the voice is output through the speaker. Accordingly, the user decides whether to approve and controls opening / closing of the door by pressing a button.

8 is an explanatory diagram of a real-time remote monitoring function by moving picture transmission and reception according to the present invention

The user may call the remote access security system of the present invention from time to time to drive the outdoor terminal 100 and check the image and sound transmitted by the outdoor terminal 100 through a mobile phone. By connecting to a server system that automatically stores information, visitors' records stored on that server system can be checked remotely.

In addition, when a plurality of surveillance cameras are installed and operated as shown in FIG. 8, the plurality of surveillance cameras are connected to the remote access security system of the present invention to display images captured by the plurality of surveillance cameras. Can be configured to be monitored from the remote site and monitored. The apparatus further includes a wireless transmitting means installed in each of the plurality of surveillance cameras, and a wireless receiving means for receiving a signal transmitted from the cameras and applying it to an internal controller in an outdoor terminal or an indoor terminal of the present invention. This is accomplished by selectively sending a plurality of camera information received by the controller to the mobile phone. Even in this case, a plurality of users may check the situation from time to time, and may store the information of the checked state and provide the user with the information of the state.

9 is an explanatory diagram of an automatic voice / image transmission function when an emergency occurs according to the present invention.

When there is an unauthorized intruder in the absence of the user, that is, when the door is forcibly opened or there is a fear of damage, the outdoor device 100 is automatically operated while the alarm device is activated. The camera and microphone of the outdoor terminal 100 are operated to automatically transmit the moving picture and sound of the field to the user's mobile phone by connecting the mobile phone of the indoor terminal 200 to automatically relay the field situation.

In addition, if the emergency alarm condition persists for a certain period of time, that is, the user does not release the alarm by responding to the mobile phone, it is automatically connected to a nearby police box, a police station, or a contracted private security center to take immediate action. This allows the timer to be activated when an emergency signal is generated and automatically connected if the alarm is not released after a certain time has elapsed.

As described in detail above, according to the present invention, a mobile phone connection function is further included in a normal interphone function, and a moving picture and sound can be transmitted to the mobile phone to enable a conversation with a visitor, and the door is opened / closed through the mobile phone. By controlling the control of the door from the remote can be effective.

In addition, the present invention can connect the access control of the visitor to a plurality of users at the same time can be jointly managed by a plurality of users, by calling the system of the present invention with a mobile phone can check the site situation from a remote place from time to time, the alarm device it has the effect of controlling the operation of the door lock device. In addition, according to the present invention, the visitor's record is automatically updated to the server system, and when necessary, the visitor's record can be connected to the server system at any time to check the visitor's record. It has the effect of letting you control.

Cited By (32)

Publication number	Priority date	Publication date	Assignee	Title
KR20010069630A *	2001-04-24	2001-07-25	모수형	The method and Security and visitor communication systems based on IP network
KR20010093604A *	2000-03-29	2001-10-29	정양권	A cyber phone protection system using internet network system
KR20030012151A *	2001-07-30	2003-02-12	윤인수	System for watching a specific zone for the real-time based on the internet surroundings
WO2003028375A1 *	2001-09-27	2003-04-03	Mobiletalk Co., Ltd.	Remote-control entrance door system and method
KR20030067286A *	2002-02-07	2003-08-14	정혁진	A Electronic Lotto service method and equipment by RF- Card & Mobile Message
KR20030077768A *	2002-03-27	2003-10-04	주식회사 이코	Self-reception system
KR20030082670A *	2002-04-18	2003-10-23	에스케이 텔레콤주식회사	Home network system and method using mobile network
KR20030089770A *	2002-05-18	2003-11-28	엘지전자 주식회사	Cyber apartment security system and method using ip phone-gateway
KR100443329B1 *	2002-03-21	2004-08-09	최낙훈	Video phone having a function of VoIP-based internet phone
KR100446490B1 *	2002-01-31	2004-08-30	주식회사 아이레보	System for controlling door
KR20040082508A *	2003-03-19	2004-09-30	황철원	System for controlling door lock through mobile communication network and method thereof
KR100459824B1 *	2002-08-26	2004-12-04	김영수	Door lock system
KR100485650B1 *	2001-12-21	2005-04-27	디아이케이(주)	A confirmable doorkey and method thereof using wireless networks
KR100801605B1 *	2005-08-22	2008-02-11	박재석	Door lock system with camera
KR100816462B1 *	2005-12-29	2008-03-26	육상조	DoorPhone System
KR100834127B1 *	2006-06-13	2008-06-02	고오아이엠(주)	Door controller
KR100857157B1 *	2006-08-29	2008-09-05	카시와야마 오토히테	A vehicle home automation security device of using the interphone
KR20180074434A *	2016-12-23	2018-07-03	동서대학교산학협력단	sensible door lock control method using iris recognition

CN109981688A *	2019-04-18	2019-07-05	浙江西谷数字技术股份有限公司	A kind of cloud intercommunication building gate control system and its management method based on WebRTC
KR102679826B1 *	2023-11-27	2024-07-01	(주)피에이엔지나어링	Method, device and system for managing electrical panel integration that allows door opening and closing control for each panel unit
Family To Family Citations				
US8154581B2	2002-10-15	2012-04-10	Revolutionary Concepts, Inc.	Audio-video communication system for receiving person at entrance
KR100626219B1	2004-07-27	2006-09-20	대광학	Message transmission apparatus having absent time data storage function
US20180343141A1	2015-09-22	2018-11-29	Skybell Technologies, Inc.	Doorbell communication systems and methods
US11651665B2	2013-07-26	2023-05-16	Skybell Technologies Ip, Llc	Doorbell communities
US11764990B2	2013-07-26	2023-09-19	Skybell Technologies Ip, Llc	Doorbell communications systems and methods
US11889009B2	2013-07-26	2024-01-30	Skybell Technologies Ip, Llc	Doorbell communication and electrical systems
US11837040B2	2013-07-26	2023-12-05	Skybell Technologies Ip, Llc	Smart lock systems and methods
US11909649B2	2013-07-26	2024-02-20	Skybell Technologies Ip, Llc	Doorbell communication systems and methods
US10742938B2	2015-03-07	2020-08-11	Skybell Technologies Ip, Llc	Garage door communication systems and methods
KR101768172B1 *	2015-04-08	2017-08-16	한림대학교 산학협력단	Remote door lock
US11641452B2	2015-05-08	2023-05-02	Skybell Technologies Ip, Llc	Doorbell communication systems and methods
US11074790B2	2019-08-24	2021-07-27	Skybell Technologies Ip, Llc	Doorbell communication systems and methods

* Cited by examiner, † Cited by third party, ‡ Family to family citation

Similar Documents

Publication	Publication Date	Title
KR100373449B1	2003-03-04	Remote security system for coming and out
US9865165B2	2018-01-09	Notification of visitors
WO2006067782A1	2006-06-29	Method and device for use in a cellular network
KR101725083B1	2017-04-11	Home network system and control method thereof
CN101695100A	2010-04-14	Intelligent household security system and control method thereof
EP2592830A1	2013-05-16	Video door entry system
KR20060068760A	2006-05-22	Control method and apparatus for door phone using hand-held terminal device to remote location
KR200192740Y1	2000-08-16	Remote security system for coming and out
KR100415018B1	2004-01-13	System for network-based internet, electronic unmanned guard and home automation service
JP3716171B2	2005-11-16	Home security method using mobile devices
JP2000299740A	2000-10-24	Interphone provided with transfer function
JPH10283585A	1998-10-23	Residence supervisory controller
KR20016019901A	2001-03-15	Doorphone system capable of taking over the telephone with a visitor during my absence
JP2004135200A	2004-04-30	Interphone system
KR20050014357A	2005-02-07	Home networking system connected with home automation machine using home gateway and computer
JPH11144171A	1999-05-28	Apartment house management system

JP6507188B2	2019-04-24	Housing security system
KR100738556B1	2007-07-11	Home network system for control of video device
KR200255553Y1	2001-12-13	Home control system
JP2004135199A	2004-04-30	Interphone system
KR102553423B1	2023-07-10	Automatic control system for the front door of the lobby
JP2004348520A	2004-12-09	Security system for multiple dwelling house
KR100685813B1	2007-02-23	Apparatus for controlling door using server pc and camera and interphone and method thereof
KR200373546Y1	2005-01-15	Door lock emergency alarm apparatus
KR20070118844A	2007-12-18	Door controller

Priority And Related Applications

Child Applications (1)

Application	Priority date	Filing date	Relation	Title
KR2020000005938U	2000-02-24	2000-03-03	Division	Remote security system for coming and out

Priority Applications (2)

Application	Priority date	Filing date	Title
KR10-2000-0009172A	2000-02-24	2000-02-24	Remote security system for coming and out
KR2020000005938U	2000-02-24	2000-03-03	Remote security system for coming and out

Applications Claiming Priority (1)

Application	Filing date	Title
KR10-2000-0009172A	2000-02-24	Remote security system for coming and out

Legal Events

Date	Code	Title	Description
2000-02-24	A201	Request for examination	
2002-01-21	E902	Notification of reason for refusal	
2002-03-20	AMND	Amendment	
2002-09-27	E501	Decision to refuse application	
2002-10-24	J201	Request for trial against refusal decision	
2002-11-06	AMND	Amendment	
2003-01-16	B701	Decision to grant	
2003-02-11	GRNT	Written decision to grant	
2007-02-12	FPAY	Annual fee payment	Payment date: 20070213 Year of fee payment: 5
2008-02-12	LAPS	Lapse due to unpaid annual fee	

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ELECTRONIC PAYMENT RECEIPT

APPLICATION #
90/019,542RECEIPT DATE / TIME
11/11/2024 10:13:50 PM Z ETATTORNEY DOCKET #
-

Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 67921010

AUTHORIZED BY -

CUSTOMER # 178493

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CORRESPONDENCE
ADDRESS -FIRST NAMED
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Payment Information

PAYMENT METHOD
CARD / 4039PAYMENT TRANSACTION ID
E2024AAM14165701PAYMENT AUTHORIZED BY
Kirby Drake

FEE CODE	DESCRIPTION	ITEM PRICE(\$)	QUANTITY	ITEM TOTAL(\$)
2822	EACH REEXAMINATION CLAIM IN EXCESS OF 20 AND ALSO IN EXCESS OF THE NUMBER OF CLAIMS IN THE PATENT UNDER EXAMINATION	40.00	111	4440.00
2821	EACH RE-EXAMINATION INDEPENDENT CLAIM IN EXCESS OF THREE AND ALSO IN EXCESS OF THE NUMBER OF SUCH CLAIMS IN THE PATENT UNDER EXAMINATION	192.00	6	1152.00
TOTAL AMOUNT:				\$5,592.00

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Exhibit A

Table Showing Section 112 Support for Pending Claims

A written-description support for each claim as a whole is identified in the table below. In so far as there are any differences between the limitations recited below and the amendments listed in the section “Amendments to the Claims”, the amendments listed in the section “Amendments to the Claims” control.

Claim No.	Claim Text	Support
1.1	A doorbell monitoring system comprising:	A doorbell monitoring system is depicted in Fig. 1. The monitoring system is also described throughout the specification.
1.2	a doorway having an environment;	<p>A doorway having an environment is depicted in Fig. 1 (element 18). A doorway having an environment is also described in the specification in reference to Fig. 1. Col. 2 ll. 11-21 (“includes a doorway 18 to a home having an environment 20.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.3	a doorbell located in an entry way, the activation of the doorbell being a triggering event;	<p>Doorbell is disclosed as a part of the communication portion which “includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29” in particular embodiments. Col. 2 ll. 13-17. As the video camera 22 and exterior speaker 28 are disclosed as “disposed in the doorway” the doorbell could also be located in an entry way based on the specification. Col. 2 ll. 22-24. Furthermore, a POSA would understand that the doorbell could be located in an entry way.</p> <p>The activation of the doorbell being a triggering event is also disclosed in the specification. <i>E.g.</i>, Col. 3 ll. 4-5 (“a triggering event such as ringing of a doorbell.”)</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
1.4	a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;	<p>A video camera and an external microphone disposed in the entry way is depicted in Fig. 1 (elements 22 and 24). They are also described in the specification in reference to Fig. 1. Col. 2 ll. 22-23 (“A video camera 22 and an external microphone 24 are disposed in the doorway 18.”).</p> <p>The specification describes an embodiment capturing visual and audio communications at the entry way in response to actuation of the proximity detector. <i>See e.g.</i>, Col. 2 ll. 35-44 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted”). A POSA would understand that another triggering event, such as ringing of a doorbell, could also initiate the same. <i>See also</i>, Col. 7 ll. 36-45, Col. 7 ll. 31-45 (where requesting and receiving additional video in response to visitor at a doorway is described).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.5	an external speaker disposed in the entry way, the external speaker for rendering received audio communications;	<p>An external speaker disposed in the entry way is depicted in Fig. 1 (element 28). It is also described in the specification in reference to Fig. 1. Col. 2 ll. 23-24 (“A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18.”).</p> <p>External speaker rendering received audio communications is also described in reference to Fig. 1. Col. 2 ll. 45-47 (“Similarly, the control unit relays captured cellular audio communications from the homeowner 16 to the external speaker 28.”); Col. 6 ll. 8-9 (“At block 100, the audio communications are rendered at the entry point”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.6	a control unit in communication with the video camera, the doorbell, and the external microphone,	<p>A control unit is depicted in Fig. 2 (element 40). It shown in Fig. 2 and described in the specification as in communication with the video camera, the doorbell, and the external microphone. It is also described as communicating at least one portion of the visual and audio</p>

Claim No.	Claim Text	Support
	the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;	<p>communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker. <i>E.g.</i>, Col. 3 ll. 9-26 (“A control unit portion 40, or control unit 40, controls a communication portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44.”); Col. 4 ll. 32-35.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.7	a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and	<p>A cellular telephone is depicted in Fig. 2 (element 30). It is shown in Fig. 2 and described in the specification as disposed remotely to the doorway and the control unit. It is also described as capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit. <i>E.g.</i>, Col. 3 ll. 27-30 (“The cellular telephone network or cellular network 44 is employed to relay visual and audio data from the control unit to the cellular telephone 30 and relay audio data and control signals from the cellular telephone 30 to the control unit 40.”); Col. 4 ll. 27-35.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.8	the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;	<p>The control unit and its components are depicted in Fig. 3. The control unit comprising control panel, alarm system interface, microcontroller, and video monitor is described in the specification. <i>E.g.</i>, Col 4 ll. 64 - Col. 5 ll. 6; Col. 5 ll. 7-16 (“the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74 ... A video monitor 76 is coupled to the microcontroller 60”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
1.9	wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;	<p>A single communications unit including doorbell, video camera, external microphone, external speaker and proximity detector are shown in Fig. 2 and Fig. 3 (element 42). It is also described in reference to Fig. 2 and Fig. 3. Col. 3 ll. 9-26 (“the communication portion 42 includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29, which may included as part of the communication portion 42 in particular embodiments.”); Col 4 ll. 64 - Col. 5 ll. 6 (“proximity detector 26 of the communication unit 42”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.10	wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications; and	<p>A single communications unit capable of playing pre-recorded message to visitor at the entry way is described. Col. 5 ll. 7-16; Col. 5 ll. 27-35 (“The OGM player/recorder 64 is a device for presenting pre-recorded messages to visitors”); Col. 6 ll. 52-55 (“Additionally, the homeowner may preprogram the control unit to play a pre-recorded message from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.”); Col. 7 ll. 22-35 (“Option 2: Play a Pre-Recorded Greeting”). A POSA would understand that the pre-recorded message would be played on the communications unit which contains an external speaker.</p> <p>Wirelessly streaming is supported by the specification. The specification describes that components of the system may be connected wirelessly. <i>E.g.</i>, Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).</p> <p>The specification also describes rendering realtime visual and audio data and streaming. Col. 5 ll. 57-60 (“The video</p>

Claim No.	Claim Text	Support
		<p>monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”); Col. 8 ll. 39-40 (“Alternatively, streaming audio and video may be delivered.”). In combination with wireless connections above, POSA would understand that visual and audio communications necessarily can be wirelessly streamed in the system. Therefore, wireless streaming is supported by the specification generally.</p> <p>The captured video and audio communications being streamed is also described. <i>E.g.</i>, Col. 2 ll. 36-44 (“At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 8 ll. 39-40 (“Alternatively, streaming audio and video may be delivered.”).</p> <p>Wirelessly streaming at least a portion of the captured visual and audio communications is also described. <i>E.g.</i>, Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
1.11	wherein the control unit is capable of receiving audio communications from the cellular telephone.	<p>Control unit receiving audio communications from the cellular telephone is described. <i>E.g.</i>, Col. 2 ll. 35-44; Col. 2 ll. 45-47 (“the control unit relays captured cellular audio communications”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.1	A method for providing doorbell monitoring, the method comprising:	<p>A method for providing doorbell monitoring is at least depicted in Fig. 4. The method is also described in relation to Fig. 4 in the specification. <i>E.g.</i>, Col. 5 ll. 66 - Col. 6 ll. 12.</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
8.2	ringing of a doorbell at an entry point	<p>Ringling the doorbell at an entry point is disclosed in the specification. <i>E.g.</i>, Col. 3 ll. 4-6.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.3	responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;	<p>Capturing visual and audio communications at the entry point is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 90, visual and audio communications are captured at an entry point.”). A POSA would understand that the process would be initiated from a triggering event which is the ringing of the doorbell. <i>E.g.</i>, Col. 3 ll. 4-5 (“a triggering event such as ringing of a doorbell.”) <i>See also</i>, Col. 7 ll. 36-45, Col. 7 ll. 31-45 (where requesting and receiving additional video in response to visitor at a doorway is described).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.4	relaying at least a portion of the captured visual and audio communications to a cellular phone;	<p>Relaying at least a portion of the captured visual and audio communications to a cellular phone is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 92, at least a portion of the captured visual and audio communications are relayed to a cellular telephone.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.5	rendering the least a portion of the captured visual and audio communications at the cellular phone;	<p>Rendering the least a portion of the captured visual and audio communications at the cellular phone is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 94, the at least a portion of the captured visual and audio communications are rendered at the cellular telephone.”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
8.6	capturing audio communications at the cellular phone;	<p>Capturing audio communications at the cellular phone is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 96, audio communications are captured at the cellular phone.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.7	relaying the audio communications from the cellular phone to the entry point;	<p>Relaying the audio communications from the cellular phone to the entry point is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“The audio communications are relayed from the cellular phone to the entry point at block 98.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.8	rendering the audio communications at the entry point via a communications unit;	<p>Rendering the audio communications at the entry point via the communications unit is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 100, the audio communications are rendered at the entry point”). External speaker is part of the communications unit and therefore audio communication is rendered through the communications unit.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.9	wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit;	<p>Support for wirelessly streaming is shown above. <i>See</i> 1.10. Communication unit configured to communicate the visual and audio communications via a wireless connection is depicted in Fig. 2 and described in the specification. Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
8.10	sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera;	<p>Sending a notification to the cellular phone is described in the specification. <i>E.g.</i>, Col. 2 ll. 35-44 (where actuation of the proximity detector initiating communication to the cellular telephone is described); Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”).</p> <p>Range of detection is inherent in a proximity detector. Therefore, a POSA would understand that a proximity detector would be set with a predetermined range of detection.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.11	receiving at the control unit a request to send additional information regarding an event associated with the doorbell;	<p>Receiving at the control unit portion a request to send additional information regarding an event associated with the doorbell is described in the specification. Col. 4. ll. 57-64 (“In response to the notification, the homeowner 16 may send a signal to the control unit portion 40 to either ignore the notification and event or accept more information including images or video about the notification and event.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.12	notifying a home security company when an emergency event occurs at the entry point;	<p>Notifying a home security company when an emergency event occurs at the entry point is described in the specification. <i>E.g.</i>, Col. 5 ll. 45-48 (“notify a home security company or the police department in the instance of a break-in or other crime.”); Col. 7 ll. 54-59 (“Option 6: Notify Alarm Company allows the homeowner to notify the alarm company or alternatively the police department of a potential or actual problem.”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
8.13	sending video communications before the proximity detector is actuated; and	<p>Sending video communications before actuation of a proximity detector located in the doorway is described in the specification. Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.14	authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;	<p>Authenticating the homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone is described in the specification. <i>E.g.</i>, Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated. By way of example, in one implementation, the homeowner may be required to enter a passcode to authenticate the identity of the homeowner. If the homeowner does not enter the passcode, then the call is disconnected.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
8.15	wherein the doorbell is part of the single communications unit which also comprises the camera, the proximity detector, a microphone, and a speaker.	<p>Single communications unit including doorbell, video camera, external microphone, speaker and proximity detector are shown in Fig. 2 and Fig. 3 (element 42). It is also described in reference to Fig. 2 and Fig. 3. Col. 3:9-26 (“the communication portion 42 includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29, which may included as part of the communication portion 42 in particular embodiments.”); Col 4 ll. 64 - Col. 5 ll. 6 (“proximity detector 26 of the communication unit 42”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
19.1	A system for providing doorbell monitoring, the system comprising:	<i>See 1.1.</i>
19.2	a doorway to a home having an environment;	<i>See 1.2.</i>
19.3	a doorway located in the doorway, the ringing of the doorbell being a triggering event;	<i>See 1.3.</i>
19.4	a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;	<i>See 1.4.</i>

Claim No.	Claim Text	Support
19.5	a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway;	<p>A proximity detector disposed in the entry way is depicted in Fig. 1 (element 26). It is also described in the specification in reference to Fig. 1. Col. 2 ll. 23-24 ("A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18."). The proximity detector actuating the video camera and the external microphone in response to an individual approaching the doorway is also described. Col. 2 ll. 35-38 ("In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.").</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
19.6	an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;	<i>See</i> 1.5.
19.7	a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and	<i>See</i> 1.6.

Claim No.	Claim Text	Support
19.8	a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit,	<i>See</i> 1.7.
19.9	thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.	<p>Permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home is described in the specification. <i>E.g.</i>, Col. 2 ll. 47-52 (“In this manner, the homeowner is permitted to monitor the home in substantially realtime while away and, further, the homeowner 16 and individual 34 are able to communicate as if the homeowner 14 was at home.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
21.1	The doorbell monitoring system of claim 1,	<p>A doorbell monitoring system is depicted in Fig. 1. The monitoring system is also described throughout the specification.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
21.2	wherein the proximity detector detects a person proximate to the entry point;	A proximity detector is depicted in Fig. 1 (element 26). It is also described as part of the single communications unit. Col 4 ll. 64 - Col. 5 ll. 6 (“proximity detector 26 of the communication unit 42”). Proximity detector detecting a person proximate to the entry point is also described. Col.

Claim No.	Claim Text	Support
		<p>2 ll. 35-36 (“an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
21.3	wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and	<p>Detection by the proximity detector of a person proximate to the entry point as a triggering event is described in the specification. Col. 2 ll. 35-36 (“an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated.”); Col. 6 ll. 14-16 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block”). A POSA would understand from the description that the actuation of the proximity detector would constitute a triggering event.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
21.4	wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.	<p>Support for wirelessly streaming is shown above. <i>See</i> 1.10. Video camera and external microphone, responsive to the triggering event, capturing entry point and entry point visual and audio communications at the entry point and wirelessly streaming the captured entry point visual and audio communications data to the control unit is described in the specification. Col. 2 ll. 36-44 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 6 ll. 16-21 (“in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
22	The doorbell monitoring system of claim 1, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.	<p>The single communications system configured to capture additional video from the video camera after the triggering event is described in the specifications. The specification describes “a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.” Col. 3 ll. 6-8. Furthermore, the specification describes that “the video camera 22 may be integrated into the doorbell 29 ... that the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30.” Col. 4 ll. 46-51. Therefore, the specification supports additional audio or video from the video camera after the triggering event. Furthermore, the specification also describes requesting and receiving additional data after the triggering event. Col. 7 ll. 36-45; see Col. 7 ll. 31-45. Therefore, a POSA would understand that the control unit would be capable of receiving additional audio or video from the video camera after the triggering event.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
23	The doorbell monitoring system of claim 22, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.	<p>The single communications system is configured to capture additional video from the video camera after the second triggering event (actuation of proximity detector) is described in the specifications. <i>E.g.</i>, Col. 2 ll. 35-41 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.”)</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
24.1	The doorbell monitoring system of claim 22, wherein the single communications unit is configured to capture additional video from the video camera	<i>See</i> 23.

Claim No.	Claim Text	Support
	after a second triggering event;	
24.2	wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;	<p>Doorbell of recording video and audio before any type of triggering event. Col. 6 ll. 21-24 (“as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively ... At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114. At the control unit, in one implementation, the data is stored in the data storage.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
24.3	wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;	<p>Support for wirelessly streaming is shown above. <i>See</i> 1.10. Doorbell wirelessly streaming video communications after detection by a proximity detector is described in the specifications. Col. 2 ll. 35-41 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit “); Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
24.4	wherein the doorbell monitoring system comprises an alarm system interface; and	<p>An alarm system interface is depicted on Fig. 3 (element 68). Doorbell monitoring system comprising of an alarm system interface is described in the specifications. Col. 5 ll. 7-11 (“the components of the control unit 40 ... include ... an alarm system interface 68”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
24.5	wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.	<p>One or more offsite servers to facilitate communications between the cellular telephone, control unit, and single communications unit after a triggering event is described in the specifications. Col. 4 ll. 21-26 (“In the instances when data is transferred to or from the cellular telephone via the Internet, the cellular network 44 may include onsite (or home) or offsite servers that are setup by a security company or the homeowner to facilitate the transfer of the data.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
25	The doorbell monitoring system of claim 1, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.	<p>The specification describes the control unit displaying the entry point visual and audio communications on the video monitor. Col. 5 ll. 55-57 (“data stored on the data storage unit 74 may be transferred to a different medium or played on a video monitor 76.”); Col. 6 ll. 15-20 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
26	The doorbell monitoring system of claim 25, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.	<p>The specification describes displaying the entry point visual and audio communications in realtime. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
27.1	The doorbell monitoring system of claim 1, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;	<p>The specification describes the control unit capable of displaying the entry point visual and audio communications on the video monitor in substantially real time. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
27.2	wherein the doorbell monitoring system is capable of authenticating a user of the system; and	<p>Doorbell monitoring system capable of authenticating a user of the system is described in the specifications. Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
27.3	wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.	<p>Authentication of one or more communications related to the doorbell monitoring system is described in the specifications. <i>E.g.</i>, Col. 6 ll. 39-55; Col. 8 ll. 15-18. Specifically, at least a call authentication is described in the specification. Col. 6 ll. 42-49.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
28.1	The doorbell monitoring system of claim 1, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;	<i>See 27.1</i>
28.2	wherein the doorbell monitoring system is capable of authenticating a user of the system;	<i>See 27.2</i>

Claim No.	Claim Text	Support
28.3	wherein the doorbell is capable of recording video and audio before any type of triggering event;	<i>See 27.3</i>
28.4	wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;	<p>Doorbell capable of transmitting video communications after detection by a proximity detector is described in the specifications. Col. 2 ll. 35-44 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
28.5	wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and	<p>Doorbell and control panel capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone is depicted in Fig. 2. Also, the communication between doorbell and control panel is described in the specifications. Col. 3 ll. 9-26. The communication between the control panel to the cellular phone is distinctly described in the specifications. Col. 3 ll. 27-34, <i>see also</i>, Table 1.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
28.6	wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.	Data storage unit is described as a component of the control unit. Col. 5 ll. 7-16. Data storage unit is described as capable of storing entry point visual and audio communications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
29	The doorbell monitoring system of claim 1, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.	<i>See 28.6</i>
30.1	The doorbell monitoring system of claim 1, wherein the alarm system interface is connected to an alarm system, and	<p>Alarm system interface connected to an alarm system is disclosed in the specifications. Col. 5 ll. 42-44 (“The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
30.2	wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.	<p>A control panel, with a video monitor, which allows an individual to manage the alarm system is disclosed in the specifications. Col. 5 ll. 63-65 (“The video monitor 76 and interior microphone 80, when used together, provide a traditional monitor with intercom system for the homeowner.”). Furthermore, a menu which is an interface that allows user of a cellular telephone to take an action is described in the specification. Col. 6 ll. 56-67; <i>see also</i>, Table 2. A POSA would understand that the traditional video monitor would have a graphical user interface to allow an individual to manage the alarm system.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
31	The doorbell monitoring system of claim 1, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.	<p>Control unit generating a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit is described in the specification. <i>E.g.</i>, Col 6 ll. 28-34 (“the control unit generates an image or video file that includes at least a portion of the visual or audio/visual data collected by the video camera and the exterior microphone.”)</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
32	The doorbell monitoring system of claim 1, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.	<p>A menu which is an interface that allows user of a cellular telephone to take an action after receiving at least a portion of the entry point visual and audio communications captured by the communications unit is described in the specification. Col. 6 ll. 56-67; <i>see also</i>, Table 2.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
33	The doorbell monitoring system of claim 32, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an	<p>The actions of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action are described in the specifications. Col 6 ll. 56-67; Col. 7 ll. 22-35; Col. 7 ll. 52-65; <i>see also</i>, Table 2.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
	alarm company, or (5) no action.	
34	The doorbell monitoring system of claim 1, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.	<p>At least the data storage is an onsite storage device. <i>See</i> Col. 5 ll. 7-16 (“components of the control unit 40 ... include ... a data storage unit 74”); <i>See also</i> Col. 3 ll. 17-19. (“Preferably, the control unit 40 is located onsite”)</p> <p>Data storage unit is described as capable of storing entry point visual and audio communications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
35	The doorbell monitoring system of claim 1, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.	<p>The stored video and audio communications is accessible by an additional device apart from the control unit is described in the specification. <i>E.g.</i> Col. 2 ll. 36-40 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”); Col. 5 ll. 55-57 (“Moreover, data stored in the data storage unit 74 may be transferred to a different medium or played on the video monitor 76.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
36	The system of claim 34, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.	<p>Onsite storage device providing access to stored video and audio communications in substantially realtime is described in the specification. <i>E.g.</i>, Col. 2 ll. 53-58 (“Accordingly, the security system 10 and accompanying method presented herein permit the homeowner 16 or designated entity or individual, who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.”); Col. 8 ll. 4-8</p>

Claim No.	Claim Text	Support
		<p>(“The operations of blocks 132 and 134 permit the homeowner who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
37	The system of claim 34, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.	<p>Wired connection between onsite storage device and control unit is disclosed in the specification. <i>E.g.</i> Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by a wired connection”); Col. 5 ll. 16-19 (“It should be appreciated that these components described in FIG. 3 may be connected to the microcontroller 60 and interconnected by wired connections, wireless connections, or a combination thereof.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
38.1	A doorbell monitoring system comprising:	<i>See</i> 1.1.
38.2	a doorway having an environment;	<i>See</i> 1.2.
38.3	a doorbell located in an entry way, the activation of the doorbell being a triggering event;	<i>See</i> 1.3.
38.4	a video camera and an external microphone disposed in the entry way, the video camera and external	<i>See</i> 1.4.

Claim No.	Claim Text	Support
	microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;	
38.5	an external speaker disposed in the entry way, the external speaker for rendering received audio communications;	<i>See 1.5.</i>
38.6	a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;	<i>See 1.6.</i>
38.7	a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone,	<i>See 1.7.</i>

Claim No.	Claim Text	Support
	transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and	
38.8	the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;	<i>See</i> 1.8.
38.9	wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;	<i>See</i> 1.9.
38.10	wherein the entry point visual and audio communications are wirelessly streamed to the control unit;	<p>Support for wirelessly streaming is shown above. <i>See</i> 1.10. Entry point visual and audio communications are streamed to the control unit is described in the specifications. <i>E.g.</i>, Col. 2 ll. 36-44 (“At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
38.11	wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor;	<p>Control unit capable of displaying the entry point visual and audio communications on the video monitor is described in the specifications. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter</p>
38.12	wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit;	<p>Data storage unit is described as a component of the control unit. Col. 5 ll. 7-16. Data storage unit is described as capable of storing entry point visual and audio communications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
38.13	wherein the control panel is capable of allowing an individual to manage a security system;	<p>The control panel is described in the specification as allowing an individual to manage the security system. Col. 5 ll. 39-40 (“the control panel 66 permits the homeowner or other individual to manage the security system 10.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
38.14	wherein the alarm system interface of the control panel is capable of interfacing with the security system;	<p>The alarm system interface of the control panel is described as interfacing with the security system. Col. 5 ll. 42-44 (“The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
38.15	wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime;	<p>The specification describes entry point visual and audio communications being displayed by the control unit in substantially real time. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
38.16	wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed; and	<p>Control unit receiving entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed is described in the specification. <i>See</i> Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
38.17	wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.	<p>The specification describes “a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.” Col. 3 ll. 6-8. Therefore, the specification supports additional audio or video from the video camera after the triggering event. Furthermore, the specification also describes requesting and receiving additional data after the triggering event. Col. 7 ll. 36-45; <i>see</i> Col. 7 ll. 31-45. Therefore, a POSA would understand that the control unit would be capable of receiving additional audio or video from the video camera after the triggering event.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
39	The doorbell monitoring system of claim 38, wherein the proximity detector detects a person proximate to the entry point; wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.	<i>See 21.1-21.4</i>
40.1	The doorbell monitoring system of claim 38, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point	<i>See 1.10</i>

Claim No.	Claim Text	Support
40.2	as well as capturing video before the proximity detector is triggered or the doorbell is triggered.	<p>Single communications unit capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user is described in the specifications. Col. 3 ll. 1-8 (“The video cameras 22 may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.”); Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
41.1	The doorbell monitoring system of claim 38, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data	<i>See 1.10</i>
41.2	and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.	<p>Single communications unit further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user is described in the specifications. Col. 3 ll. 1-8 (“The video cameras 22 may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of</p>

Claim No.	Claim Text	Support
		<p>the occurrence of the triggering event.”); Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
42	The doorbell monitoring system of claim 38, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.	<i>See 22.</i>
43	The doorbell monitoring system of claim 42, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.	<i>See 23.</i>
44	The doorbell monitoring system of claim 42, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event; wherein the doorbell is capable of recording visual and audio communications before	<i>See 24.1-24.5</i>

Claim No.	Claim Text	Support
	<p>any type of triggering event; wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector; wherein the doorbell monitoring system comprises an alarm system interface; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.</p>	
45	<p>The doorbell monitoring system of claim 38, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of</p>	<p><i>See 27.1-27.3.</i></p>

Claim No.	Claim Text	Support
	authentication of one or more communications related to the doorbell monitoring system.	
46	<p>The doorbell monitoring system of claim 38, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event; wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector; wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used</p>	See 28.1-28.6

Claim No.	Claim Text	Support
	to transmit the entry point visual and audio communications from the control unit to the cellular phone; and wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.	
47	The doorbell monitoring system of claim 44, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.	<i>See 30.1-30.2.</i>
48	The doorbell monitoring system of claim 38, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 31.</i>

Claim No.	Claim Text	Support
49	The doorbell monitoring system of claim 38, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 32.</i>
50	The doorbell monitoring system of claim 49, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.	<i>See 33.</i>
51	The doorbell monitoring system of claim 38, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the	<i>See 34.</i>

Claim No.	Claim Text	Support
	captured visual and audio communications.	
52	The doorbell monitoring system of claim 38, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.	<i>See 35.</i>
53	The system of claim 51, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.	<i>See 36.</i>
54	The system of claim 51, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.	<i>See 37.</i>
55.1	A doorbell monitoring system comprising:	<i>See 1.1.</i>

Claim No.	Claim Text	Support
55.2	a doorway having an environment;	<i>See</i> 1.2.
55.3	a doorbell located in an entry way, the activation of the doorbell being a triggering event;	<i>See</i> 1.3.
55.4	a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;	<i>See</i> 1.4.
55.5	an external speaker disposed in the entry way, the external speaker for rendering received audio communications;	<i>See</i> 1.5.
55.6	a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video	<i>See</i> 1.6.

Claim No.	Claim Text	Support
	camera and the external microphone, and for communicating the received audio communications to the external speaker; and	
55.7	a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit;	<i>See 1.7.</i>
55.8	wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;	<i>See 1.9.</i>
55.9	wherein the entry point visual and audio communications are wirelessly streamed to the control unit;	<i>See 38.10.</i>

Claim No.	Claim Text	Support
55.10	wherein the control unit is capable of storing the entry point visual and audio communications captured by the communications unit in a data storage unit of the control unit;	<p><i>See</i> 38.12. Since the video camera 22 and exterior microphone 24 is part of the communications unit, 55.10 is also supported. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
55.11	wherein the control panel is capable of allowing an individual to manage a security system;	<i>See</i> 38.13.
55.12	wherein an alarm system interface of the control panel is capable of interfacing with the security system;	<i>See</i> 38.14.
55.13	wherein the control unit is capable of receiving the entry point visual and audio communications captured by the communications unit before actuation of the proximity detector located in the doorway or if the doorbell is pressed;	<i>See</i> 38.16.
55.14	wherein the control unit is capable of receiving additional audio or video from the video camera after actuation of the proximity detector;	Control unit receiving additional audio or video from the video camera after the actuation of the proximity detector is described in the specification. <i>E.g.</i> , Col. 2, ll. 35-38 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.”); Col. 6 ll. 14-

Claim No.	Claim Text	Support
		<p>18 (“As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
55.15	wherein the doorbell monitoring system is capable of establishing communication with the control unit upon actuation of the doorbell;	<p>Establishing communication with the control unit upon actuation of the doorbell is described. Col. 4 ll. 49-51 (“the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
55.16	wherein at least a portion of the initial communication after the doorbell is actuated is a notification sent to the cellular telephone; and	<p>Initial communication after the doorbell is actuated being a notification sent to the cellular telephone is described in the specification. <i>E.g.</i> Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
55.17	wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.	<p>Doorbell monitoring system capable of authenticating a user of the system is described in the specifications. <i>E.g.</i>, Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
56	The doorbell monitoring system of claim 55, wherein the proximity detector detects a person proximate to the entry point; wherein the detection by the proximity detector of the person proximate to the entry	<i>See</i> 21.1-21.4

Claim No.	Claim Text	Support
	point provides a second triggering event; and wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.	
57	The doorbell monitoring system of claim 55, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.	<i>See</i> 1.10; 41.1-41.2.
58	The doorbell monitoring system of claim 55, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.	<i>See</i> 22.

Claim No.	Claim Text	Support
59	The doorbell monitoring system of claim 58, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.	<i>See 23.</i>
60	The doorbell monitoring system of claim 58, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event; wherein the doorbell is capable of recording visual and audio communications before any type of triggering event; wherein the doorbell is also capable of wirelessly streaming video communications after detection by a proximity detector; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.	<i>See 24.1-24.5.</i>

Claim No.	Claim Text	Support
61	The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.	<i>See 25.</i>
62	The doorbell monitoring system of claim 61, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.	<i>See 26.</i>
63	The doorbell monitoring system of claim 55, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.	<i>See 27.1-27.3.</i>

Claim No.	Claim Text	Support
64	<p>The doorbell monitoring system of claim 55, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event; wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector; wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and wherein the control unit further comprises a data storage unit wherein the</p>	<p><i>See 28.1-28.6.</i></p>

Claim No.	Claim Text	Support
	control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.	
65	The doorbell monitoring system of claim 55, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.	<i>See 30.1-30.2.</i>
66	The doorbell monitoring system of claim 55, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 31.</i>
67	The doorbell monitoring system of claim 55, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after	<i>See 32.</i>

Claim No.	Claim Text	Support
	receiving at least a portion of the entry point visual and audio communications captured by the communications unit.	
68	The doorbell monitoring system of claim 67, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.	<i>See 33.</i>
69	The doorbell monitoring system of claim 55, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.	<i>See 34.</i>
70	The doorbell monitoring system of claim 55, wherein the stored video and audio communications are accessible by an	<i>See 35.</i>

Claim No.	Claim Text	Support
	additional device apart from the control unit.	
71	The system of claim 69, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.	<i>See 36.</i>
72	The system of claim 69, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.	<i>See 37.</i>
73.1	A doorbell monitoring system comprising:	<i>See 1.1.</i>
73.2	a doorway having an environment;	<i>See 1.2.</i>
73.3	a doorbell located in an entry way, the activation of the doorbell being a triggering event;	<i>See 1.3.</i>

Claim No.	Claim Text	Support
73.4	a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;	<i>See 1.4.</i>
73.5	an external speaker disposed in the entry way, the external speaker for rendering received audio communications;	<i>See 1.5.</i>
73.6	a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;	<i>See 1.6.</i>

Claim No.	Claim Text	Support
73.7	a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and	<i>See</i> 1.7.
73.8	the control unit comprising a control panel, an alarm system interface, a microcontroller, data storage unit and a video monitor communicatively coupled to the microcontroller;	<p><i>See</i> 1.8. This element has an addition of a “data storage unit” which the cited specification supports. <i>E.g.</i>, Col 4 ll. 64 - Col. 5 ll. 6; Col. 5 ll. 7-16 (“the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74 ... A video monitor 76 is coupled to the microcontroller 60”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
73.9	wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;	<i>See</i> 1.9.
73.10	wherein the entry point visual and audio communications are wirelessly streamed to the control unit;	<i>See</i> 38.10.

Claim No.	Claim Text	Support
73.11	wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit;	<i>See 38.12.</i>
73.12	wherein the alarm system interface of the control panel is capable of interfacing with a security system;	<i>See 38.14.</i>
73.13	wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime;	<i>See 38.15.</i>
73.14	wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed;	<i>See 38.16.</i>
73.15	wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event; and	<i>See 38.17.</i>
73.16	wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system.	A menu of options provided to the user is described in the specifications. Col. 6 ll. 56-67; <i>see also</i> , Table 2. Options being activated using a voice activation system is also described. Col. 6 ll. 56-67 (“Alternatively, for example, a voice activated system may be utilized.”).

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
74	The doorbell monitoring system of claim 73, wherein the proximity detector detects a person proximate to the entry point; wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.	<i>See 21.1-21.4</i>
75	The doorbell monitoring system of claim 73, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before the proximity	<i>See 1.10; 40.1-40.2.</i>

Claim No.	Claim Text	Support
	detector is triggered or the doorbell is triggered.	
76	The doorbell monitoring system of claim 73, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.	<i>See</i> 1.10; 41.1-41.2.
77	The doorbell monitoring system of claim 73, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.	<i>See</i> 22.
78	The doorbell monitoring system of claim 77, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.	<i>See</i> 23.

Claim No.	Claim Text	Support
79	<p>The doorbell monitoring system of claim 77, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event; wherein the doorbell is capable of recording visual and audio communications before any type of triggering event; wherein the doorbell is also capable of wirelessly streaming video communications after detection by a proximity detector; wherein the doorbell monitoring system comprises an alarm system interface; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.</p>	<p><i>See 24.1-24.5</i></p>
80	<p>The doorbell monitoring system of claim 73, wherein the control unit is capable of displaying</p>	<p><i>See 27.1-27.3.</i></p>

Claim No.	Claim Text	Support
	<p>the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.</p>	
81	<p>The doorbell monitoring system of claim 73, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event; wherein the doorbell is also capable of transmitting video communications after</p>	<p><i>See 28.1-28.6</i></p>

Claim No.	Claim Text	Support
	<p>detection by the proximity detector; wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.</p>	
82	<p>The doorbell monitoring system of claim 73, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.</p>	<p><i>See 30.1-30.2.</i></p>

Claim No.	Claim Text	Support
83	The doorbell monitoring system of claim 73, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 31.</i>
84	The doorbell monitoring system of claim 73, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 32.</i>
85	The doorbell monitoring system of claim 84, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an	<i>See 33.</i>

Claim No.	Claim Text	Support
	alarm company, or (5) no action.	
86	The doorbell monitoring system of claim 73, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.	<i>See 34.</i>
87	The doorbell monitoring system of claim 73, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.	<i>See 35.</i>
88	The system of claim 86, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.	<i>See 36.</i>
89	The system of claim 86, wherein the control unit communicates the captured visual and audio communications to the onsite storage	<i>See 37.</i>

Claim No.	Claim Text	Support
	device via wired communication.	
90.1	A doorbell monitoring system comprising:	<i>See 1.1.</i>
90.2	a doorway having an environment;	<i>See 1.2.</i>
90.3	a doorbell located in an entry way, the activation of the doorbell being a triggering event;	<i>See 1.3.</i>
90.4	a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;	<i>See 1.4.</i>
90.5	an external speaker disposed in the entry way, the external speaker for rendering received audio communications;	<i>See 1.5.</i>

Claim No.	Claim Text	Support
90.6	a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;	<i>See 1.6.</i>
90.7	a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and	<i>See 1.7.</i>
90.8	wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;	<i>See 1.9.</i>

Claim No.	Claim Text	Support
90.9	wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;	<i>See</i> 1.10.
90.10	wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed; and	<i>See</i> 38.16.
90.11	wherein the control unit is capable of receiving additional audio or video from the video camera after actuation of the proximity detector.	<i>See</i> 55.14.
91	The doorbell monitoring system of claim 90, wherein the proximity detector detects a person proximate to the entry point; wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and	<i>See</i> 21.1-21.4

Claim No.	Claim Text	Support
	wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.	
92	The doorbell monitoring system of claim 90, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.	<i>See 1.10; 41.1-41.2.</i>
93	The doorbell monitoring system of claim 90, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.	<i>See 22.</i>

Claim No.	Claim Text	Support
94	The doorbell monitoring system of claim 93, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.	<i>See 23.</i>
95	The doorbell monitoring system of claim 93, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event; wherein the doorbell is capable of recording visual and audio communications before any type of triggering event; wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector; wherein the doorbell monitoring system comprises an alarm system interface; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular	<i>See 24.1-24.5.</i>

Claim No.	Claim Text	Support
	telephone, the control unit, and the single communications unit after a triggering event.	
96	The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.	<i>See 25.</i>
97	The doorbell monitoring system of claim 96, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.	<i>See 26.</i>
98	The doorbell monitoring system of claim 90, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is	<i>See 27.1-27.3.</i>

Claim No.	Claim Text	Support
	also capable of authentication of one or more communications related to the doorbell monitoring system.	
99	<p>The doorbell monitoring system of claim 90, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime; wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event; wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector; wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from</p>	<p><i>See 28.1-28.6</i></p>

Claim No.	Claim Text	Support
	the control unit to the cellular phone; and wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.	
100	The doorbell monitoring system of claim 90, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.	<i>See 29.</i>
101	The doorbell monitoring system of claim 95, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.	<i>See 30.1-30.2.</i>

Claim No.	Claim Text	Support
102	The doorbell monitoring system of claim 90, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 31.</i>
103	The doorbell monitoring system of claim 90, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.	<i>See 32.</i>
104	The doorbell monitoring system of claim 103, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an	<i>See 33.</i>

Claim No.	Claim Text	Support
	alarm company, or (5) no action.	
105	The doorbell monitoring system of claim 90, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.	<i>See 34.</i>
106	The doorbell monitoring system of claim 90, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.	<i>See 35.</i>
107	The system of claim 105, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.	<i>See 36.</i>
108	The system of claim 105, wherein the control unit communicates the captured visual and audio communications to the onsite storage	<i>See 37.</i>

Claim No.	Claim Text	Support
	device via wired communication.	
109	The method of claim 8, wherein rendering at the cellular phone further comprises: rendering a menu option that when selected would take no action based upon an actuation of a security system.	<p>A menu option for no action is described in the specifications. Col. 7 ll. 15-21 (“Option 1: No Action”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
110	The method of claim 8 further comprising: communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.	<p>Communicating at least a portion of the captured audio communications at the cellular phone via a cellular network is described in the specification. <i>E.g.</i>, Col. 3 ll. 9-26 (“A control unit portion 40, or control unit 40, controls a communication portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44.”); Col. 4 ll. 32-35.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
111.1	The method of claim 8, further comprising: storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point	<p>Storing at least a portion of the captured visual and audio communications by the communications unit at the control unit located locally to the entry point is described in the specification. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>

Claim No.	Claim Text	Support
111.2	wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.	<p>Control unit comprising of a switch, control panel, alarm system interface, microcontroller, and a video monitor communicatively coupled to a microcontroller is described in the specification. Col 4 ll. 64 - Col. 5 ll. 6; Col. 5 ll. 7-16 (“the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74 ... A video monitor 76 is coupled to the microcontroller 60”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
112	The method of claim 111, further comprising: recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.	<p>Steps of recording video after the proximity detector is triggered and sending the video recorded before and after the triggering of the proximity sensor to the cellular phone are described in the specification. Col. 6 ll. 14-19 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively ... At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114. At the control unit, in one implementation, the data is stored in the data storage.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
113.1	The method of claim 8, further comprising: activating an alarm system interface via a control unit,	<p>Step of activating an alarm system interface via a control unit is described in the specifications. Col. 5 ll. 39-48 (“In one implementation, the control panel 66 is onsite as well as accessible through the cellular telephone 30 ... By way of example, this feature permits the homeowner to utilize the cellular telephone 30 to notify a home security company or the police department in the instance of a break-in or other crime.”); Col. Col 7 ll. 54-59 (“Option 6: Notify Alarm Company”).</p>

Claim No.	Claim Text	Support
		Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
113.2	wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.	<p>The switch, control panel, alarm system interface, microcontroller, and a video monitor communicatively coupled to a microcontroller is described in the specification. <i>E.g.</i>, Col 4 ll. 64 - Col. 5 ll. 6; Col. 5 ll. 7-16 (“the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74 ... A video monitor 76 is coupled to the microcontroller 60”); <i>see also</i>, 1.8.</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
114	The method of claim 8, further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.	<p>Interface on a cellular phone that provides an option to request further image or video data is described in the specification. Col. 6 ll. 56-67; <i>see also</i>, Table 2; Col 7 ll. 36-48 (“Option 3: Request Further Image or Video Data”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
115	The method of claim 8, further comprising: providing an interface that provides an option to notify an alarm company.	<p>Interface on a cellular phone that provides an option to notify an alarm company is described in the specification. Col. 6 ll. 56-67; <i>see also</i>, Table 2; Col 7 ll. 54-59 (“Option 6: Notify Alarm Company”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
116.1	A method for providing doorbell monitoring, the method comprising:	<i>See</i> 8.1.

Claim No.	Claim Text	Support
116.2	ringing of a doorbell at an entry point;	<i>See 8.2.</i>
116.3	responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;	<i>See 8.3.</i>
116.4	relaying at least a portion of the captured visual and audio communications to a cellular phone;	<i>See 8.4.</i>
116.5	rendering the least a portion of the captured visual and audio communications at the cellular phone;	<i>See 8.5.</i>
116.6	capturing audio communications at the cellular phone;	<i>See 8.6.</i>
116.7	relaying the audio communications from the cellular phone to the entry point;	<i>See 8.7.</i>
116.8	rendering the audio communications at the entry point via a single communications unit;	<i>See 8.8.</i>

Claim No.	Claim Text	Support
116.9	wherein the single communications unit is configured to wirelessly stream the visual and audio communications via a wireless connection;	Support for wirelessly streaming is shown above. <i>See</i> 1.10. Communication unit configured to wirelessly stream the visual and audio communications via a wireless connection. Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”). Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
116.10	sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;	<i>See</i> 8.10.
116.11	receiving at a control unit a request to send additional information regarding an event associated with the doorbell;	<i>See</i> 8.11.
116.12	wirelessly streaming video communications from the single communications unit before the proximity detector is actuated; and	Support for wirelessly streaming is shown above. <i>See</i> 1.10. Streaming video communication from the communications unit before the proximity detector is actuated is supported by the specification. Col. 2 ll. 35-41 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit “); Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing

Claim No.	Claim Text	Support
		wireless local area technology or radio frequency technology”). Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.
116.13	authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;	<i>See</i> 8.14.
116.14	wherein the single communications unit also comprises a camera, the proximity detector, a microphone, and a speaker.	<i>See</i> 8.15.
117	The method of claim 116, wherein rendering at the cellular phone further comprises: rendering a menu option that when selected would take no action based upon an actuation of a security system.	<i>See</i> 109.
118	The method of claim 116, further comprising: communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.	<i>See</i> 110.

Claim No.	Claim Text	Support
119	The method of claim 116, further comprising: storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.	<i>See 111.1-111.2.</i>
120	The method of claim 119, further comprising: recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.	<i>See 112.</i>
121	The method of claim 116, further comprising: activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a	<i>See 113.1.-113.2.</i>

Claim No.	Claim Text	Support
	microcontroller, and a video monitor communicatively coupled to the microcontroller.	
122	The method of claim 116, further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.	<i>See</i> 114.
123	The method of claim 116, further comprising: providing an interface that provides an option to notify an alarm company.	<i>See</i> 115.
124.1	A method for providing doorbell monitoring, the method comprising:	<i>See</i> 8.1.
124.2	ringing of a doorbell at an entry point;	<i>See</i> 8.2.
124.3	responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;	<i>See</i> 8.3.

Claim No.	Claim Text	Support
124.4	relaying at least a portion of the captured visual and audio communications to a cellular phone;	<i>See 8.4.</i>
124.5	rendering the least a portion of the captured visual and audio communications at the cellular phone;	<i>See 8.5.</i>
124.6	capturing audio communications at the cellular phone;	<i>See 8.6.</i>
124.7	relaying the audio communications from the cellular phone to the entry point;	<i>See 8.7.</i>
124.8	rendering the audio communications at the entry point;	<i>See 8.8.</i>
124.9	sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;	<i>See 8.10.</i>
124.10	wherein the doorbell is part of a single communications unit which also comprises a camera, the proximity	<i>See 8.15.</i>

Claim No.	Claim Text	Support
	detector, a microphone, and a speaker;	
124.11	wherein the camera is integrated into the doorbell;	<p>Camera integrated into the doorbell is described in the specification. Col. 4 ll. 46-51 (“the video camera 22 may be integrated into the doorbell 29”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
124.12	sending from a control unit additional information regarding an event associated with the doorbell;	<p>Sending from a control unit portion additional information regarding an event associated with the doorbell is described in the specification. <i>E.g.</i>, Col. 4. ll. 56-64 (“the homeowner 16 may send a signal to the control unit portion 40 to either ignore the notification and event or accept more information including images or video about the notification and event.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.</p>
124.13	notifying a home security company when an emergency event occurs at the entry point;	<i>See</i> 8.12.
124.14	wirelessly streaming video communications before the proximity detector is actuated; and	<p>Support for wirelessly streaming is shown above. <i>See</i> 1.10. “Sending video communications before actuation of a proximity sensor located in the doorway is described in the specification. Col. 6 ll. 21-24 (““This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.””).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.”</p>

Claim No.	Claim Text	Support
124.15	wirelessly streaming video communications after the proximity detector is actuated.	<p>Support for wirelessly streaming is shown above. <i>See</i> 1.10. Wirelessly streaming video communications after the proximity detector is actuated is supported by the specification. <i>E.g.</i>, Col. 2, ll. 35-38 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.”); Col. 6 ll. 14-18 (“As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively.”).</p> <p>Thus by at least the above disclosure, the limitation is well supported and does not constitute new matter.”</p>
125	The method of claim 124, wherein rendering at the cellular phone further comprises: rendering a menu option that when selected would take no action based upon an actuation of a security system.	<i>See</i> 109.
126	The method of claim 124, further comprising: communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.	<i>See</i> 110.
127	The method of claim 124, further storing at least a portion of the captured visual and audio communications by the single communications unit at	<i>See</i> 111.1-111.2.

Claim No.	Claim Text	Support
	the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.	
128	The method of claim 127, further comprising: recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.	<i>See 112.</i>
129	The method of claim 124, further comprising: activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.	<i>See 113.1.-113.2.</i>

Claim No.	Claim Text	Support
130	The method of claim 124, further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.	<i>See 114.</i>
131	The method of claim 124, further comprising: providing an interface that provides an option to notify an alarm company.	<i>See 115.</i>

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요약

본 발명은 원격 출입 보안 시스템에 관한 것으로서, 출입의 보안이 중요시되는 사무실 등의 출입문에 설치되고 카메라, 액정 표시화면, 스피커, 마이크 및 각종 조작버튼 등이 구비되어 방문자가 호출함과 아울러 음성 화상 통화를 실현시켜 주는 방문자용 실외 단말기와; 그 실외 단말기에서 촬영된 방문자 영상을 표시함과 아울러 음성/화상 통화를 연결하며, 출입문의 개방 폐쇄 제어와 방문자의 호출시 사용자의 휴대폰과의 음성/화상 통신을 자동으로 연결시켜 상기 실외 단말기와 원격지의 휴대폰간의 양방향 통신이 이루어지게 하는 사용자용 실내 단말기로 구성된다.

따라서, 본 발명에서는 휴대폰의 음성/화상 송수신 기능을 이용하여 방문자가 호출할 경우 자동으로 휴대폰 연결을 하여 양방향 대화를 실현시킴과 아울러 원격지에서 출입자를 확인하고 출입을 허가/통제 할 수 있다. 또한 본 발명은 인터넷을 통해 서버 시스템으로 자동 연결되어 사용자는 웹사이트에서 방문자와 화상/음성 대화가 가능함과 아울러 출입 통제 제어를 할 수 있도록 한다.

대표도
도 1

영세서

도면의 간단한 설명

도 1은 본 발명에 의한 원격 출입 감시 시스템의 구성도,
도 2는 본 발명에 의한 실외 단말기의 외관 구성도,
도 3은 본 발명에 의한 실내 단말기의 정면 판넬 구성도,
도 4는 본 발명에 의한 방문자 출입 허가에 대한 설명도,
도 5는 본 발명에 의한 방문자와 사용자의 원격 대화 설명도,
도 6은 본 발명에 의한 방문자와 다수의 사용자들간의 원격 음성/화상 통화 설명도,
도 7은 본 발명에 의한 발명자와 실내 사용자간의 인터폰 기능 설명도,
도 8은 본 발명에 의한 동화상 송수신에 의한 실시간 원격감시기능 설명도,
도 9는 본 발명에 의한 비상상황 발생시의 음성/화상 자동 송출기능 설명도.

* 도면의 주요부분에 대한 부호의 설명 *

10 : 경보장치

20 : 도어록 장치

100 : 실외 단말기

110, 210 : 카메라

120, 220 : 액정 표시부

130 : 스피커

140 : 마이크

150, 240 : 조작버튼

160, 260 : 콘트롤부

170, 270 : 직렬통신부

200 : 실내 단말기

230 : 스피커/마이크

300 : 전화기

발명의 상세한 설명

발명의 목적

발명이 속하는 기술 및 그 분야의 종래기술

본 발명은 원격 출입 보안 시스템에 관한 것으로서, 특히 휴대폰 단말기를 이용하여 기존의 휴대폰 음성/화상 송수신 기능을 활용하여 원격 출입 감시를 할 수 있도록 한 원격 출입 보안 시스템에 관한 것이다.

일반적으로 출입의 보안이 중요시되는 벤처 기업의 사무실과 공장의 개발실, 기업의 중역실 등의 출입에 대한 원격 통제 보안이 요구되고 있으나, 항상 사무실에 직원이 상주할 수는 없기 때문에 사무실에 사람이 없는 경우의 보안방법이 요구되고 있다.

그런데, 종래의 보안 방법은, 통상의 잠금장치를 이용하여 열쇠를 휴대한 경우에만 출입할 수 있도록 하는 방법 또는 출입 카드를 이용하는 방법 등이 이용되고 있다. 열쇠나 출입카드를 이용하는 경우, 열쇠 또는 출입카드의 변조 등의 우려와, 많은 수의 출입카드가 제공된 경우 누가 출입하였는지를 알 수 없는 등의 단점이 있다. 특히, 많은 수의 출입카드를 제공하는 경우 보안에 허점이 있기 때문에 출입을 제한하게 된다.

그러나, 퇴근 후나 공휴일등 사무실을 비우고 있는 경우에 출입통제를 위해서 잠금장치를 하여둔 경우, 긴급한 사항이 발생하여도 출입카드나 열쇠를 소지한 사람이 아니면 출입할 수 없는 단점이 있고, 또한 누가 출입하였는지도 알 수 없는 단점이 있었다.

발명이 이루고자 하는 기술적 과제

따라서, 본 발명에서는 휴대폰의 음성/화상 송수신 기능을 이용하여 방문자가 호출할 경우 자동으로 휴대폰 연결을 하여 양방향 대화를 실현시킴과 아울러 원격지에서 출입자를 확인하고 출입을 허가/통제 할 수 있도록 한 원격 출입 보안 시스템을 제공하기 위한 것이다.

또한, 본 발명은 인터넷을 통해 서버 시스템으로 자동 연결되어 사용자는 웹사이트에서 방문자와 화상/음성 대화가 가능함과 아울러 출입 통제 제어를 할 수 있도록 하고, 방문자의 화상/음성 메시지 등의 방문기록 정보를 서버 시스템에 자동 업데이트시켜 수시로 사용자가 웹사이트에서 확인 가능하게 하고, 사용자가 방문자에게 전달하기 위한 메시지 등을 인터넷을 통해서 기록/수정/삭제 등이 가능하도록 함에 특징이 있다.

본 발명은 출입의 보안이 중요시되는 사무실 등의 출입문에 설치되고 카메라, 액정 표시화면, 스피커, 마이크 및 각종 조작버튼이 구비되어 방문자가 호출함과 아울러 음성 화상 통화를 실현시켜 주는 방문자용 실외 단말기와; 그 실외 단말기에서 촬영된 방문자 영상을 표시함과 아울러 음성/화상 통화를 연결하며, 출입문의 개방, 폐쇄 및 제어와 방문자의 호출시 사용자의 휴대폰과의 음성/화상통신을 자동으로 연결시켜 상기 실외 단말기와 원격지의 휴대폰간의 양방향 통신이 이루어지도록 하는 사용자용 실내 단말기로 구성된다.

본 발명은 방문자가 호출하면 자동으로 사용자(출입 통제자)의 휴대폰으로 전화를 연결시켜 방문자와 원격으로 음성/화상 양방향 대화를 가능하도록 한 원격 통제 보안 시스템이다.

또한, 본 발명은 사용자가 시스템에 휴대폰을 이용하여 미리 메시지를 남겨 방문자가 호출버튼을 누르면 자동으로 메시지가 액정 화면에 표출되도록 한다.

또한, 본 발명은 카메라에 촬영되는 화상이 사용자용 실내 단말기에 근거리 송신되고 이 화상이 신호화되어 사용자가 필요시 설치 공간의 상황을 화상으로 점검 통제(개방 또는 폐쇄)하는 멀티 미디어 원격 보안 통제 시스템을 제공한다.

또한, 침입자가 본 시스템이 설치된 출입 공간 침입시 감시 카메라에 촬영되는 침입자에 대한 동화상 정보가 사용자의 휴대폰에 자동으로 전화를 걸어 공간내에 침입자가 있음을 알리고 동시에 현장의 동화상 정보가 사용자의 휴대폰에 표출된다. 이 신호는 인접한 파출소 등에 동시에 전달된다. 또한 사용자의 부재시 발생하는 모든 출입 사항은 사용자의 메인 서버 컴퓨터에 자동으로 송신되어 동화상정보가 기록되도록 한다.

발명의 구성 및 작용

이하, 본 발명의 실시 예를 첨부된 도면을 참조해서 상세히 설명하면 다음과 같다.

도 1은 본 발명에 의한 원격 출입 감시 시스템의 구성도로서, 이에 도시된 바와 같이 출입문에 설치되고 카메라(110), 액정 표시부(120), 스피커(130), 마이크(140) 및 각종 조작버튼(150) 등이 구비되어 방문자가 호출함과 아울러 음성 화상 통화를 실현시켜 주고, 사용자의 휴대폰 또는 실내 단말기를 통한 제어에 의해 도어 경보시스템과 도어록 장치를 원격 제어할 수 있도록 하는 방문자용 실외 단말기(100)와; 그 실외 단말기(100)의 호출에 의해 실외 단말기와 음성 및 화상 양방향 통신을 하고, 선택에 따라 방문자의 호출시 휴대폰과 실외 단말기(100)를 자동 연결하여 휴대폰을 통해 방문자 확인 및 통신과 도어 개방/폐쇄를 제어하는 사용자용 실내 단말기(200)로 구성된다.

도 2는 본 발명에 의한 실외 단말기의 외관 구성도이고, 도 3은 본 발명에 의한 실내 단말기의 정면 판넬 구성도이다.

상기 실외 단말기(100)는, 방문자의 영상을 촬영하기 위한 카메라(110), 실내 단말기(200) 또는 미리 저장된 영상이나 문자 메시지 등을 디스플레이 시키기 위한 액정 표시부(120), 음성 통화를 하기 위한 스피커(130) 및 마이크(140)와, 실외 단말기(100)의 메뉴 및 안내 메시지를 표시하도록 선택하기 위한 메뉴/안내키(151), 번호 입력을 위한 번호입력키(152), 실내 호출 또는 휴대폰 호출을 위한 호출키(153) 등이 구비된 조작버튼(150)과, 실외 단말기(100)의 전체 동작을 제어하여 호출버튼이 입력되었을 때 실내 단말기(200)로 연결함과 아울러 메시지 출력 및 음성통화를 실현시켜주고, 실내 단말기(200)를 통해 입력되는 정보를 해독하여 경보장치(10)의 경보제어와 도어록 장치(20)의 잠김/열림 제어를 하는 콘트롤부(160)와, 그 콘트롤부(160)와 실내 단말기(200)간의 통신을 위한 직렬통신부(170)로 구성된다.

또한, 상기 실내 단말기(200)는, 실외 단말기(100)와 양방향 화상전송을 위한 카메라(210)와, 실외 단말기(100)로부터 전송되는 화상 및 문자 메시지들을 표시하기 위한 액정 표시부(220)와, 음성 통화를 위한 스피커/마이크(230)와, 번호입력키(241)들과, 휴대폰 자동 연결 직통키(242)와, 실내 콘트롤 및 휴대폰 자동연결 직통키(243)와, 실내화상 연결 전용키(244)와, 비상시 및 각종 편리 기능을 위한 종합키(245)들을 구비한 조작버튼(240)과, 실내 단말기(200)의 전체 동작을 제어하여 상기 실외 단말기(100)와 음성 및 화상 대화를 연결하고 휴대폰 연결기능 선택에 의해 실외 단말기(100)의 호출시 자동으로 사용자 휴대폰과 상기 실외 단말기(100)를 연결시킴과 아울러 휴대폰 또는 기능버튼의 선택에 의해 도어록 장치(20) 및 경보장치(10)의 제어신호를 실외 단말기(100)로 출력하는 콘트롤부(260)와, 그 실내 단말기(200)의 콘트롤부(260)와 상기 실외 단말기(100)간의 통신 연결을 하기 위한 직렬통신부(270)를 포함하여 구성된다.

상기 액정 표시부(120)(220)는, 입력되는 메시지와 송수신 상태의 표시 및 입력된 메시지 표출, 사용자의 송출되는 문자 또는 화상 이미지 표출 등을 하도록 구성되고, 카메라(110)(210)는, 방문자와 실내 사용자간의 화상연결을 위한 화상입력을 하며, 실외 단말기(100)의 메뉴/안내키(151)는 입력시킬 메뉴를 안내하는 기능을 하되 메뉴와 안내 메시지는 콘트롤부(160)에 의해 미리 저장된 안내 메뉴를 출력하게 된다.

한편, 본 발명은 상기 실내 단말기(200)를 서버 시스템과 연결하여 웹사이트에서 실외 단말기(100)의 제어 및 실외 단말기(100)와의 통신연결을 하도록 구성할 수 있다. 즉, 실내 단말기(200)에 전화를 통한 데이터 통신연결이 가능하도록 프로그램을 구성하거나, 통신 모뎀을 설치하여 서버 시스템에 연결하고, 방문자의 호출시 자동으로 서버 시스템을 통해 사용자 아이디로 이메일 또는 전화 연결(인터넷폰)을 할 수 있도록 구성하여 방문자에 대한 방문기록 정보(화상 및 음성) 및 비상감시 상황정보를 자동으로 송출하여 서버시스템에서 기록 저장하여 관리하게 한다. 이에 따라 서버 시스템에 인터넷을 통해 연결하여 본 발명의 원격 출입 보안시스템에 대한 정보를 사용이 허가된 사용자 등이 수시로

확인할 수 있고, 아울러 전달 메시지도 저장시켜 화상 및 메시지를 실외 단말기(100)에 전달시킬 수 있다.

이와 같이 구성된 본 발명의 작용을 기능별로 설명하면 다음과 같다.

먼저 실외 단말기(100)는 통상의 실외 인터폰으로서 설치되고, 실내 단말기(200)는 실내 인터폰으로서 설치된다. 실내 단말기(200)는 통상의 실내 인터폰과 같이 전화기와 일체형 세트로서 구성될 수 있으며, 전화기를 외장형으로 연결하여 통화로 제어가 가능하도록 구성할 수 있다.

< 원격 대화기능>

방문자가 실외 단말기(100)의 호출버튼을 누르게 되면 실외 단말기(100)의 호출요구가 실내 단말기(200)로 전달되며, 실내 단말기(200)는 미리 설정된 모드에 의해 휴대폰으로 통화 연결을 하게 된다. 즉, 실내 단말기(200)에서 기능버튼을 선택하여 휴대폰 자동 연결 키를 선택해둔 경우, 상기 실외 단말기(100)의 호출 버튼이 눌리면 실내 단말기(200)는 자동으로 미리 설정되어 있는 휴대폰 전화 번호로 전화 연결을 시도하게 된다. 전화 연결은 전화기 제어 및 통화로 제어부(250)를 통해서 전화기(300)를 제어하게 되며, 전화기(300)를 통해서 휴대폰과의 통화로를 연결하여 방문자가 볼 수 있도록 실외 단말기(100)로 음성 및 화상을 연결시킨다. 여기서 화상통화는 현재의 휴대폰으로는 불가능하지만 추후 IMT 2000 사업이 상용화되어 휴대전화를 이용한 화상통신이 가능한 경우 실외 단말기(100)와 휴대폰간의 음성 및 화상통신이 가능하게 된다.

< 출입구의 원격 제어기능>

방문자가 실외 단말기(100)의 호출버튼을 눌러 사용자와 통화 연결된 경우 사용자가 원격지에서 휴대폰을 이용해 출입문의 출입을 통제할 수 있게 된다. 이는 휴대폰을 이용하여 미리 정해둔 비밀번호를 입력하고 비밀번호에 의해 출입 승인 여부를 제어하게 된다. 휴대폰을 통해서 입력되는 비밀번호 또는 경보장치와 도어록장치 제어명령은 실외 단말기(100) 또는 실내 단말기(200)가 휴대폰으로부터 전송되어온 비밀번호와 경보 및 도어록 제어명령을 해독하여 실외 단말기(100)를 통해서 경보장치(10) 또는 도어록 장치(20)를 제어한다.

경보장치(10)는 통상의 마드네틱 감지 센서를 이용한 경보장치 또는 광센서를 이용한 경보장치 또는 파손이나 충격을 감지하는 센서를 이용한 경보장치 등이 이용될 수 있는데, 본 발명에서는 실외 단말기(100)가 전송한 경보장치(10)의 작동을 제어한다. 즉, 경보장치의 메인 콘트롤러에 경보 해제신호를 입력시키도록 한다.

마찬가지로 도어록 장치(20)는 외부 전기 신호에 의해 잠금 여부를 제어할 수 있도록 하는 도어록 장치를 이용할 수 있는데, 통상의 모터나 솔레노이드 등등을 이용하여 잠금 및 해제가 가능한 도어록 장치를 사용할 수 있으며, 본 발명에서는 실외 단말기(100)가 상기한 도어록 장치(20)의 도어록 잠금 또는 해제 신호를 출력하여 도어록 장치(20)를 제어케 한다.

< 메시지 표출 기능>

본 발명에 의한 실외 단말기(100)에서는 사용자가 남겨둔 메시지를 표출할 수 있다. 메시지 입력은 사용자가 휴대폰 또는 실내 단말기(200)를 통해서 입력시킬 수 있고, 실내 단말기(200)를 이용한 경우, 기능키와 번호 입력키를 이용하여 휴대폰에서 문자 메시지 입력방법과 같은 방법으로 문자 메시지를 입력시킬 수 있으며, 입력된 메시지의 표출방법은 실외 단말기(100)에서 호출버튼을 눌렀을 경우 자동으로 표출시키는 방법과, 호출버튼을 눌렀을 경우 액정 표시부(120)에 휴대폰의 메시지 있음을 알리는 방법과 같은 로고 표시를 하여 비밀번호를 입력하였을 때만 메시지를 확인 할 수 있도록 하는 방법이 있다. 비밀번호를 입력하여 메시지를 확인하는 경우는 비밀번호를 알고 있는 사람에게만 메시지를

전달하는 방식으로 이는 일반 가정에 설치된 경우 가족에게만 전달하는 메시지를 제공할 때 유용하게 이용될 수 있다.

< 음향/동화상에 의한 실시간 현장 감시 기능>

사용자가 실내 단말기(200)에 내장 또는 외장된 전화기에 전화 연결을 하거나, 실외 단말기(100)의 호출에 의해 사용자의 휴대폰과 실외 단말기(100)와 연결이 이루어지면, 실외 단말기(100)에 설치된 카메라(110), 마이크(140) 및 스피커(130)가 구동되어 음성 통화가 가능하게 됨과 아울러 상기 카메라(110)에서 촬영된 영상을 실시간으로 휴대폰으로 송신한다. 이러한 동화상 실시간 전송은 콘트롤러가 카메라(110)의 영상을 가공하여 전송하도록 할 수 있는데, 이는 실내 단말기(200)의 콘트롤러가 동영상을 PC의 인터넷폰(동영상전화)과 같은 방식으로 신호처리를 하여 휴대폰으로 동영상을 전송하도록 함으로써 달성되며, 실내 단말기(200)를 PC에 연결하여 음성/화상통화 및 각종 제어기능을 겸하는 홈 오토메이션 장치로서 구성하면 더욱 쉽게 달성될 수 있다.

< 비상시 자동 경보 처리 작동기능>

침입자 발생시 또는 부적절한 출입 방법에 의해 불청객이 침입하였을 경우, 실외 단말기(100)의 경보장치(10)로부터 경보신호를 입력받고, 그 경보신호에 의해 실외 단말기(100)는 실내 단말기(200)로 비상 경보 신호를 송신하며, 실내 단말기(200)는 미리 정해둔 사용자 휴대폰으로 자동 연결하여 현장의 음향 및 동영상 자료를 실시간으로 전송한다. 또한, 경보 상태에 따라 인근 파출소나 사설 경호 회사 지점에 자동 연결할 수 있는데, 비상 신호 및 음향 동영상 자료를 실시간으로 송신하며, 이는 비상 경보신호 발생 후 타이머를 작동시켜 일정시간 이상 경보가 지속되는 경우 즉, 사용자가 응답을 하지 못하거나 사용자가 상황 파악에 따라 신고를 해야하는 경우 일정시간이 지나면 자동으로 실내 단말기(200)가 전화기를 이용하여 파출소나 경비회사에 통화 연결하여 신고하도록 한다.

< 다중 제어기능>

본 발명은 한 사람 또는 공간내의 모든 사용자의 휴대폰 번호를 입력하여 방문자 방문시 모든 사용자의 휴대폰으로 메시지 또는 실시간 연결을 할 수도 있는데 이는 실내 단말기(200)가 다중 전화 연결이 가능하도록 전화 통신회사의 교환기가 1대 다중 연결을 서비스하도록 설정하면 실외 단말기(100)의 호출시 실내 단말기(200)는 미리 정해둔 다중 연결 번호로 전화 연결을 시도하고 통신회사의 교환기 측에서 다중연결을 인식하여 자동으로 1 대 다중 연결을 서비스하게 된다. 이 경우 실내 단말기(200)는 다중 연결된 휴대폰으로부터 출입 승인 절차를 거쳐 모두 승인된 경우에 출입문 개방을 제어하도록 할 수 있다. 이와 같이 다중 연결 기능을 설정하여둔 경우 비상시 설정된 다중 연결 사용자 모두에게 메시지 및 동화상 자료를 실시간 전송할 수도 있게 된다.

< 일반 인터폰 기능>

실내에 사용자가 있는 경우, 실내 단말기(200)와 실외 단말기(100)는 일반 인터폰 기능으로 동작될 수 있으며, 방문자가 호출버튼을 누르면 실내 단말기(200)의 액정 표시부(220)에 실외 단말기(100)의 카메라(110)가 촬영한 영상을 표출하여 주고 스피커/마이크를 통한 음성 대화가 가능하게 되며, 출입 승인 버튼을 눌러 출입문 개방을 제어할 수 있게 된다. 실내 단말기(200)의 스피커/마이크(230)는 전화기의 송수화기와 겸용으로 사용할 수도 있으며, 일반 인터폰 또는 전화기의 스피커폰과 같은 기능으로 동작되도록 별도로 구비할 수 있다.

< 발생 자료 수시 업 데이트 기능>

본 발명은 자료가 업 데이트 될 때 마다 즉, 방문자가 출입하거나 침입자가 침투시에 해당 회사의 지정 컴퓨터에 자동 이메일 송신하여 동영상, 입력자료, 음향등이 업 데이트 되도록 할 수 있다.

도 4는 본 발명에 의한 방문자 출입 허가에 대한 설명도로서, 방문자가 방문하여 실외 단말기(100)의 번호 입력키를 이용하여 지정된 비밀번호를 입력한 후 호출 버튼을 누르면, 실내 단말기(200)가 사용자의 휴대폰으로 메시지(문자-비밀번호)를 자동으로 송신하게 되고, 사용자가 수신된 메시지를 판독 후 사용자가 소유한 휴대폰을 통해 승인이 지정된 버튼을 누르면 신호가 자동으로 송신되어 출입문이 개방되도록 한다. 이경우 방문자가 메뉴/안내키를 누르면, 출입허가를 위한 메시지 및 사용자 호출에 대해 안내하고 방문자가 허가된 방문자인지를 알 수 있도록 하는 비밀번호가 있는 경우 그 비밀번호를 입력하게 하여 사용자가 휴대폰을 통해 방문자가 누구인지를 확인하여 출입 승인을 할 수 있도록 한다.

< 인터넷을 이용한 방문자와의 통화 및 기록확인 기능>

실내 단말기(200)에 데이터 통신연결이 가능하도록 시스템을 구성하고,

그 전화기를 통해 서버 시스템에 연결하여 방문자에 대한 방문기록 정보(화상 및 음성) 및 비상감시 상황정보를 자동으로 송출하여 서버시스템에서 기록 저장하여 관리하게 한다. 이에 따라 서버 시스템에 인터넷을 통해 연결하여 본 발명의 원격 출입 보안시스템에 대한 정보를 사용이 허가된 사용자 등이 수시로 확인할 수 있고, 아울러 전달 메시지도 저장시켜 화상 및 메시지를 실외 단말기(100)에 전송시킬 수 있다.

또한, 방문자가 호출시 실내 단말기(200)에서 서버 시스템으로 자동 호출하여 방문자의 영상과 음성을 송출하면, 서버 시스템은 자동으로 미리 설정된 사용자의 휴대폰 또는 인터넷폰 또는 이메일로 자동연결하고, 사용자가 PC작업중에 전화 또는 PC통신을 통해 방문자와 화상/음성 통화가 가능하고, 출입 승인 등을 제어할 수 있도록 한다. 즉, 본 발명은 상기 휴대폰 연결과 동일하게 사용자의 PC로 자동 연결하여 PC를 통해 웹 사이트에서 출입을 통제 관리를 할 수 있도록 한다.

도 5는 본 발명에 의한 방문자와 사용자의 원격 대화 설명도이다.

방문자가 실외 단말기(100)의 호출버튼을 누르게 되면, 사용자중 지정된 사용자의 휴대폰과 자동 연결되고, 방문자와 원격 음성/동화상 대화가 가능해진다. 또한 대화 도중이나 대화 후에 필요 여부에 따라 출입구를 원격으로 개방 및 폐쇄시킬 수 있다. 이는 지정된 한 사람이나 때에 따라서는 다수의 사용자(즉, 출입 통제를 하는 다수의 사용자들) 전체와도 대화가 가능하다.

도 6은 본 발명에 의한 방문자와 다수의 사용자들간의 원격 음성/화상 통화 설명도이다.

방문자가 본 발명의 원격 출입 보안 시스템의 호출버튼을 누르게 되면, 공간의 실 사용자중 지정된 사용자 휴대폰과 자동 연결되고, 실외 단말기(100)의 상단에 부착된 카메라와 마이크에 의해 방문자의 화상과 음성이 사용자의 휴대폰으로 전달된다. 또 사용자의 음성화상도 시스템에 설치된 스피커와 액정 표시부에 디스플레이 된다. 이와 같은 방문자와의 원격 음성/동화상 통화 후 공간 실 사용자의 승인 버튼 클릭에 의해 공간을 개폐할 수 있다. 이는 지정된 한 사람이나 때에 따라서는 다수의 사용자 전체와도 대화가 가능하게 된다.

도 7은 본 발명에 의한 발명자와 실내 사용자간의 인터폰 기능 설명도이다.

실내에 사용자가 있는 경우 방문자가 호출버튼을 누르면 실내 단말기(200)의 액정 표시부(220)에 방문자의 화상이 표시되고 음성이 스피커를 통해 출력된다. 이에 따라 사용자는 승인 여부를 결정하여 버튼을 누름에 따라 출입문의 개방/폐쇄가 제어된다.

도 8은 본 발명에 의한 동화상 송수신에 의한 실시간 원격 감시 기능 설명도이다.

사용자가 수시로 본 발명의 원격 출입 보안시스템에 전화를 걸어 실외 단말기(100)를 구동시키고, 그 실외 단말기(100)에 의해 송신되는 화상 및 음향을 휴대폰을 통해 확인 할 수 있고, 또한, 출입자에 대한 정보를 자동으로 저장하는 서버시스템에 연결하여 그 서버시스템에 저장된 방문자 기록을 원격지에서도 확인 할 수 있게 된다.

또한, 도 8에 도시된 바와 같이 다수의 감시 카메라를 설치하여 운영하고 있는 경우, 본 발명의 원격 출입 보안 시스템에 상기한 다수의 감시카메라를 연결하여 그 다수의 감시 카메라에서 촬영된 영상을 휴대폰 사용자가 원격지에서 수신하여 감시 및 상황 체크를 할 수 있도록 구성 할 수 있다. 이는 다수의 감시 카메라에 각각 무선 송신수단을 설치하고, 본 발명의 실외 단말기 또는 실내 단말기에 상기한 카메라들로부터 송신된 신호를 수신하여 내부 콘트롤러에 인가시키는 무선 수신수단을 더 포함시켜 두고, 그 콘트롤러에 의해 수신된 다수의 카메라 정보들을 선택적으로 휴대폰으로 송출하게 함으로서 달성된다. 이 경우에도 다수의 사용자들이 각각 수시로 상황을 확인하게 할 수 있으며, 상황을 확인 한 상태의 정보를 저장하여 두고, 그 상태의 정보를 사용자에게 제공할 수도 있다.

도 9는 본 발명에 의한 비상상황 발생시의 음성/화상 자동 송출기능 설명도이다.

사용자의 부재시 승인되지 않은 침입자가 있을 때 즉, 출입문을 강제로 열려고 하거나 파손 등의 우려가 발생할 때, 경보장치가 작동되면서 실외 단말기(100)가 자동 작동된다. 실외 단말기(100)의 카메라 및 마이크가 작동되어 현장의 동화상 및 음향을 실내 단말기(200)의 휴대폰 연결에 의해 사용자의 휴대폰으로 자동 송출하게 하여 현장상황을 자동 중계한다.

또한, 일정시간 이상 비상경보상태가 지속되는 경우 즉, 사용자가 휴대폰으로 응답하여 경보를 해제 시켜주지 않는 경우 인근 파출소나 경찰서 또는 계약된 사설 경호 센터에 자동으로 연결되어 즉각적인 조치를 취하도록 할 수 있다 이는 비상신호 발생시 타이머가 작동되어 일정한 시간이 경과된 후까지 경보 해제가 되지 않으면 자동으로 연결되도록 한다.

발명의 효과

이상에서 상세히 설명한 바와 같이 본 발명에 의하면, 통상의 인터폰 기능에 휴대폰 연결기능을 더 포함하고, 그 휴대폰으로 동화상 및 음향을 송출하게 하여 방문자와 대화가 가능하게 하고, 휴대폰을 통해서 출입문을 개방/폐쇄를 제어할 수 있도록 함으로써 원격지에서 출입문의 통제가 가능한 효과가 있다.

또한, 본 발명은 방문자의 출입 통제를 다수의 사용자에게 동시에 연결하여 다수의 사용자가 공동 관리할 수 있으며, 휴대폰으로 본 발명의 시스템에 전화를 걸어 현장 상황을 수시로 원격지에서 확인 할 수 있고, 경보장치나 도어록 장치의 작동을 제어할 수 있는 효과가 있다. 또한, 본 발명에 의하면 방문자의 기록을 서버 시스템에 자동 업데이트하여 필요시 언제든지 그 서버 시스템에 연결하여 방문자 기록을 확인 할 수 있으며, 원격지에서 휴대폰 뿐만 아니라 웹 사이트를 이용해 방문자의 확인 및 출입 통제 등을 제어하게 할 수 있는 효과가 있다.

(57) 청구의 범위

청구항 1.

출입문에 설치되고, 카메라(110), 액정 표시부(120), 스피커(130), 마이크(140) 및 각종 조작버튼(150) 등이 구비되어 방문자가 호출함과 아울러 음성 화상 통화를 실현시켜 주고, 사용자의 휴대폰 또는 실내 단말기를 통한 제어에 의해 도어 경보시스템과 도어록 장치를 원격 제어할 수 있도록 하는 방문자용 실외 단말기(100)와;

그 실외 단말기(100)의 호출에 의해 실외 단말기와 음성 및 화상 양방향 통신에 의한 인터폰 기능과, 선택에 따라 방문자의 호출시 휴대폰과 상기 실외 단말기(100)를 자동 연결하여 휴대폰을 통해 방문자 확인 및 통신과 도어 개방/폐쇄를 제어하는 사용자용 실내 단말기(200)로 구성된 것을 특징으로 하는 원격 출입 보안 시스템.

청구항 2.

제 1 항에 있어서, 상기 실외 단말기(100)는,

방문자의 영상을 촬영하기 위한 카메라(110), 실내 단말기(200) 또는 미리 저장된 영상이나 문자 메시지 등을 디스플레이 시키기 위한 액정 표시부(120), 음성 통화를 하기 위한 스피커(130) 및 마이크(140)와, 실외 단말기(100)의 메뉴 및 안내 메시지를 표시하도록 선택하기 위한 메뉴/안내키(151), 번호 입력을 위한 번호 입력키(152), 실내 호출 또는 휴대폰 호출을 위한 호출키(153) 등이 구비된 조작버튼(150)과, 실외 단말기(100)의 전체 동작을 제어하여 호출버튼이 입력되었을 때 실내 단말기(200)로 연결함과 아울러 메시지 출력 및 음성통화를 실현시켜주고, 실내 단말기(200)를 통해 입력되는 정보를 해독하여 경보장치(10)의 경보제어와 도어록 장치(20)의 잠김/열림 제어를 하는 콘트롤부(160)와, 그 콘트롤부(160)와 실내 단말기(200)간의 통신을 위한 직렬통신부(170)로 구성된 것을 특징으로 하는 원격 출입 보안 시스템.

청구항 3.

제 1 항에 있어서, 상기 실내 단말기(200)는,

상기 실외 단말기(100)와 양방향 화상전송을 위한 카메라(210)와, 실외 단말기(100)로부터 전송되는 화상 및 문자 메시지 등을 표시하기 위한 액정 표시부(220)와, 음성 통화를 위한 스피커/마이크(230)와, 번호입력키(241)들과, 휴대폰 자동 연결 직통키(242)와, 실내 콘트롤 및 휴대폰 자동연결 직통키(243)와, 실내화상 연결 전용키(244)와, 비상시 및 각종 편리 기능을 위한 종합키(245)들을 구비한 조작버튼(240)과, 실내 단말기(200)의 전체 동작을 제어하여 상기 실외 단말기(100)와 음성 및 화상 대화를 연결하고 휴대폰 연결기능 선택에 의해 실외 단말기(100)의 호출시 자동으로 사용자 휴대폰과 상기 실외 단말기(100)를 연결시킴과 아울러 휴대폰 또는 기능버튼의 선택에 의해 도어록 장치(20) 및 경보장치(10)의 제어신호를 실외 단말기(100)로 출력하는 콘트롤부(260)와, 그 실내 단말기(200)의 콘트롤부(260)와 상기 실외 단말기(100)간의 통신 연결을 하기 위한 직렬통신부(270)를 포함하여 구성된 것을 특징으로 하는 원격 출입 보안 시스템.

청구항 4.

제 1 항에 있어서, 상기 원격 출입 보안 시스템은,

상기 실내 단말기(200)의 제어에 의해 인터넷을 통해 연결되는 서버 시스템을 더 포함하고,

그 서버 시스템은, 실내 단말기(200)에 데이터 통신연결이 가능하도록 프로그램을 구성하거나, 통신 모뎀을 설치하여 서버 시스템에 연결하고, 방문자의 호출시 자동으로 서버 시스템을 통해 사용자 아이디로 이메일 또는 전화 연결(인터넷폰)을 할 수 있도록 구성하여 방문자에 대한 방문기록 정보(화상 및 음성) 및 비상감시 상황정보를 자동으로 송출하여 서버 시스템에서 기록 저장하여 관리하고 사용자가 서버 시스템의 웹사이트를 통해 상기 실외 단말기(100)와의 화

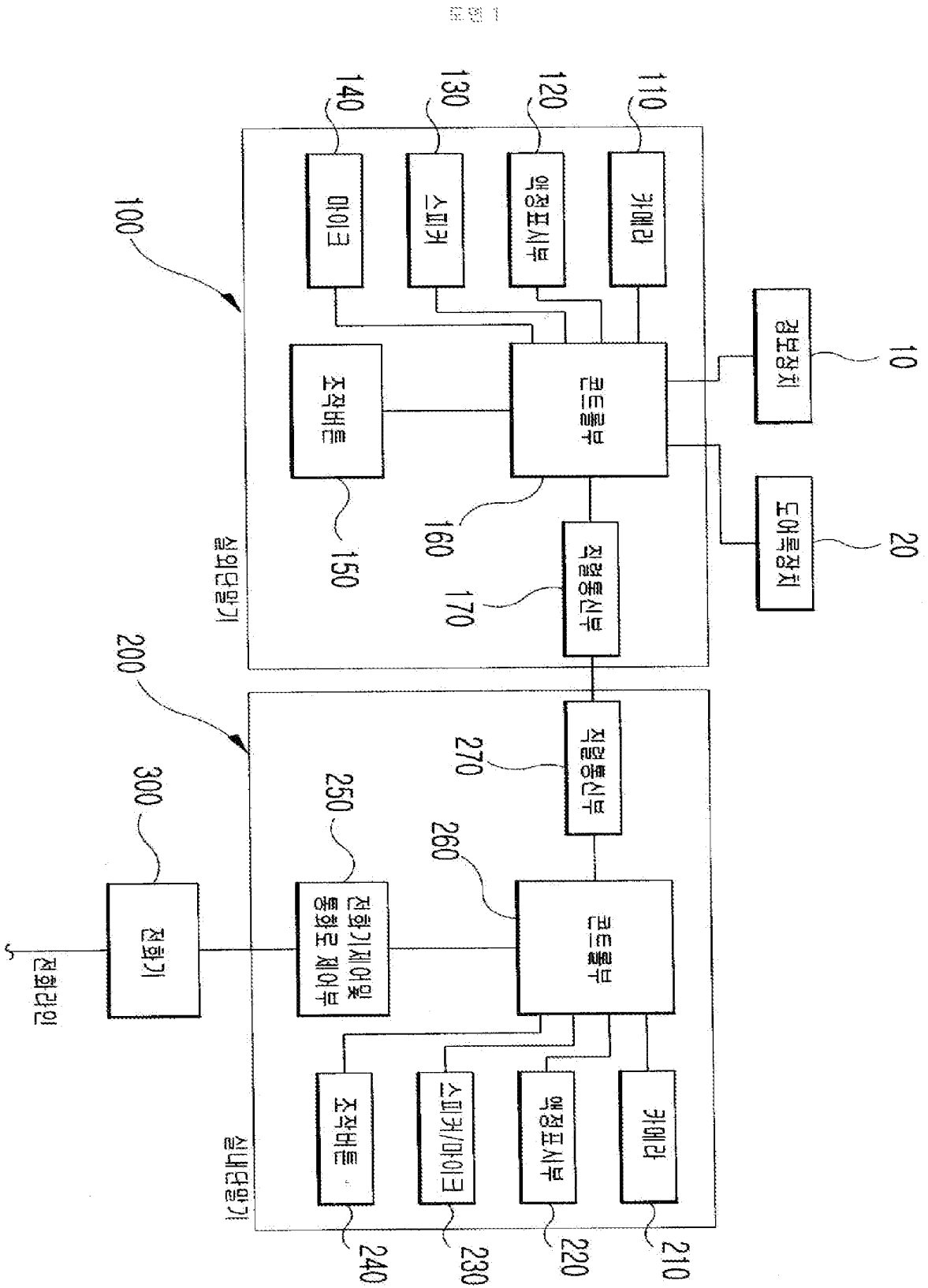
상 및 음성 통화와 출입 통제 제어를 할 수 있도록 구성된 것을 특징으로 하는 원격 출입 보안 시스템.

청구항 5.

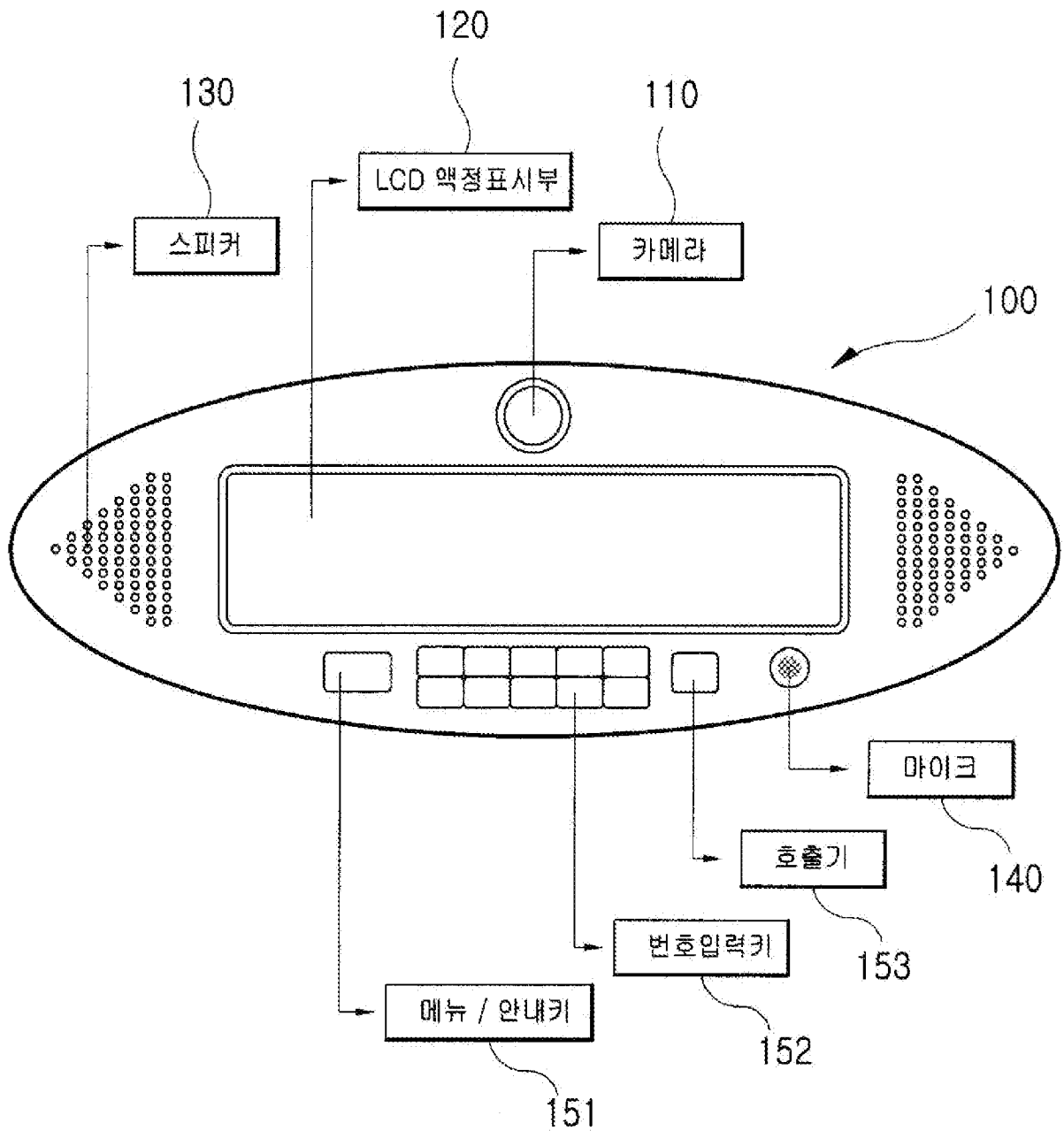
제 1 항에 있어서, 상기 원격 출입 보안 시스템은,

주변 감시를 위한 다수의 감시 카메라와 연결되고, 경보장치(10)의 경보신호 검출시 상기 다수의 감시 카메라 및 실외 단말기(100)의 카메라(110)로부터 화상정보를 입력받아 실내 단말기(200)를 통해 사용자의 휴대폰 또는 인터넷 서버 시스템으로 자동 송출하고, 일정 시간동안 경보 해제가 이루어지지 않으면 자동으로 미리 설정된 경비 센터 또는 관공서에 자동 연결하여 화상 및 음향신호를 송출하도록 이루어진 것을 특징으로 하는 원격 출입 보안 시스템.

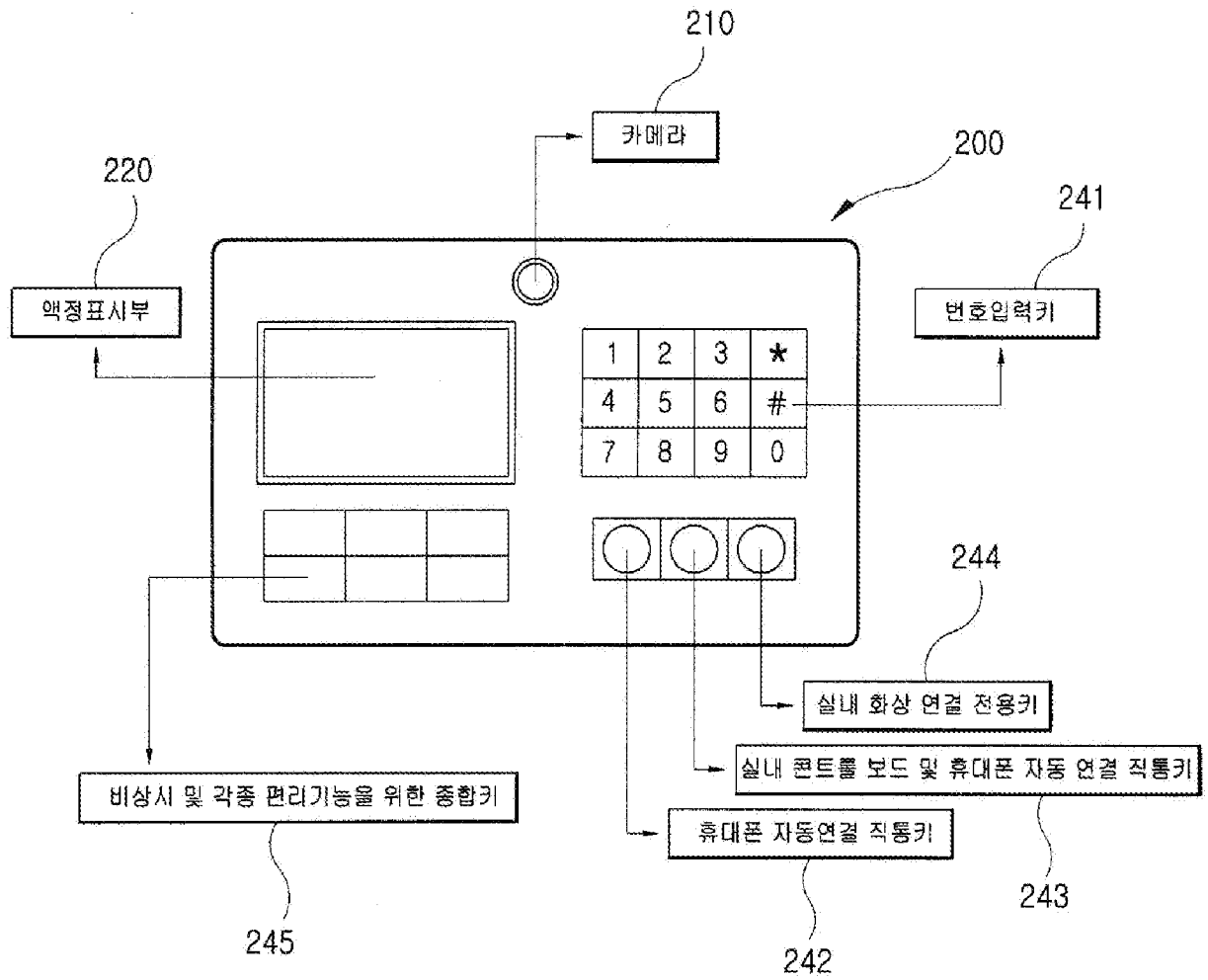
도면



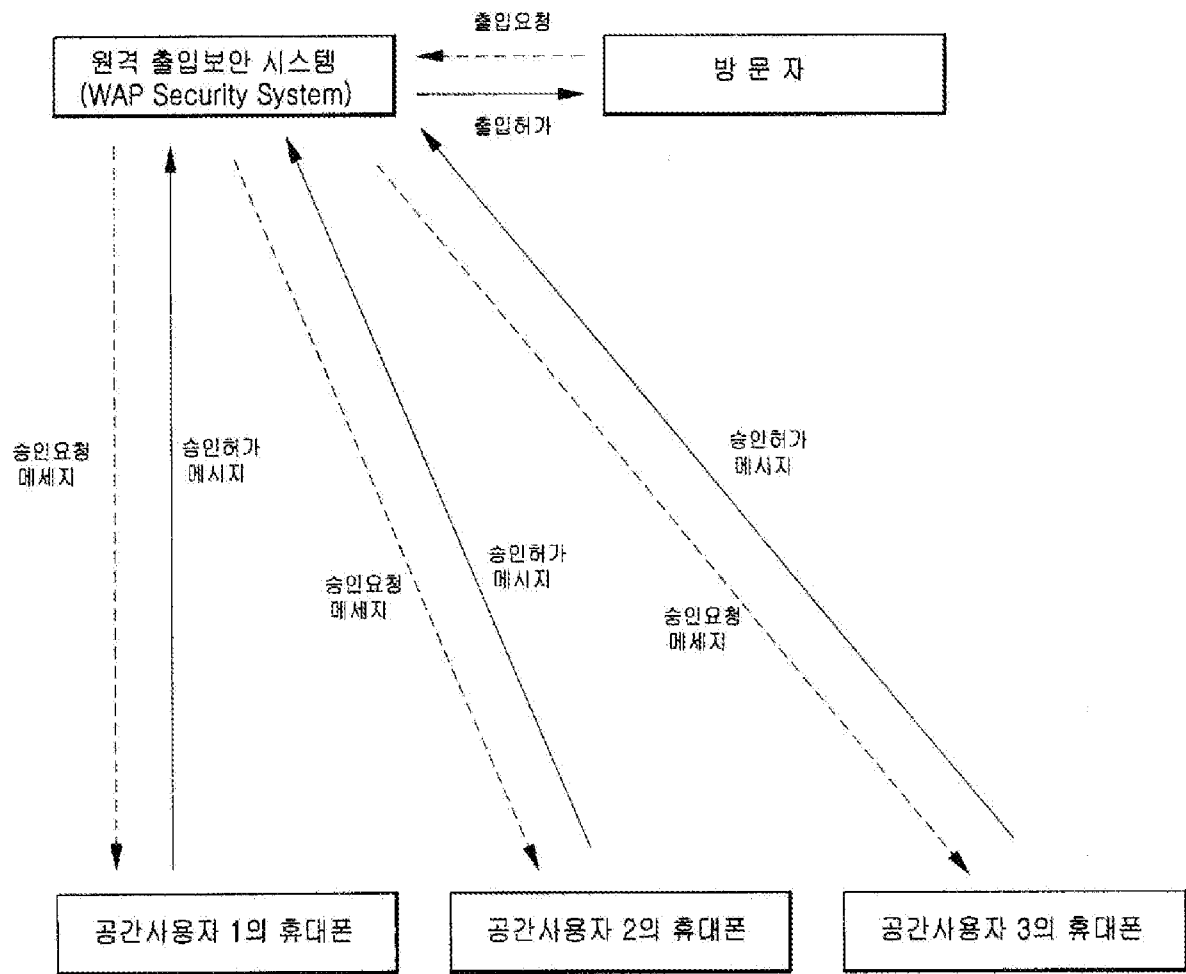
도면 2



도면 3

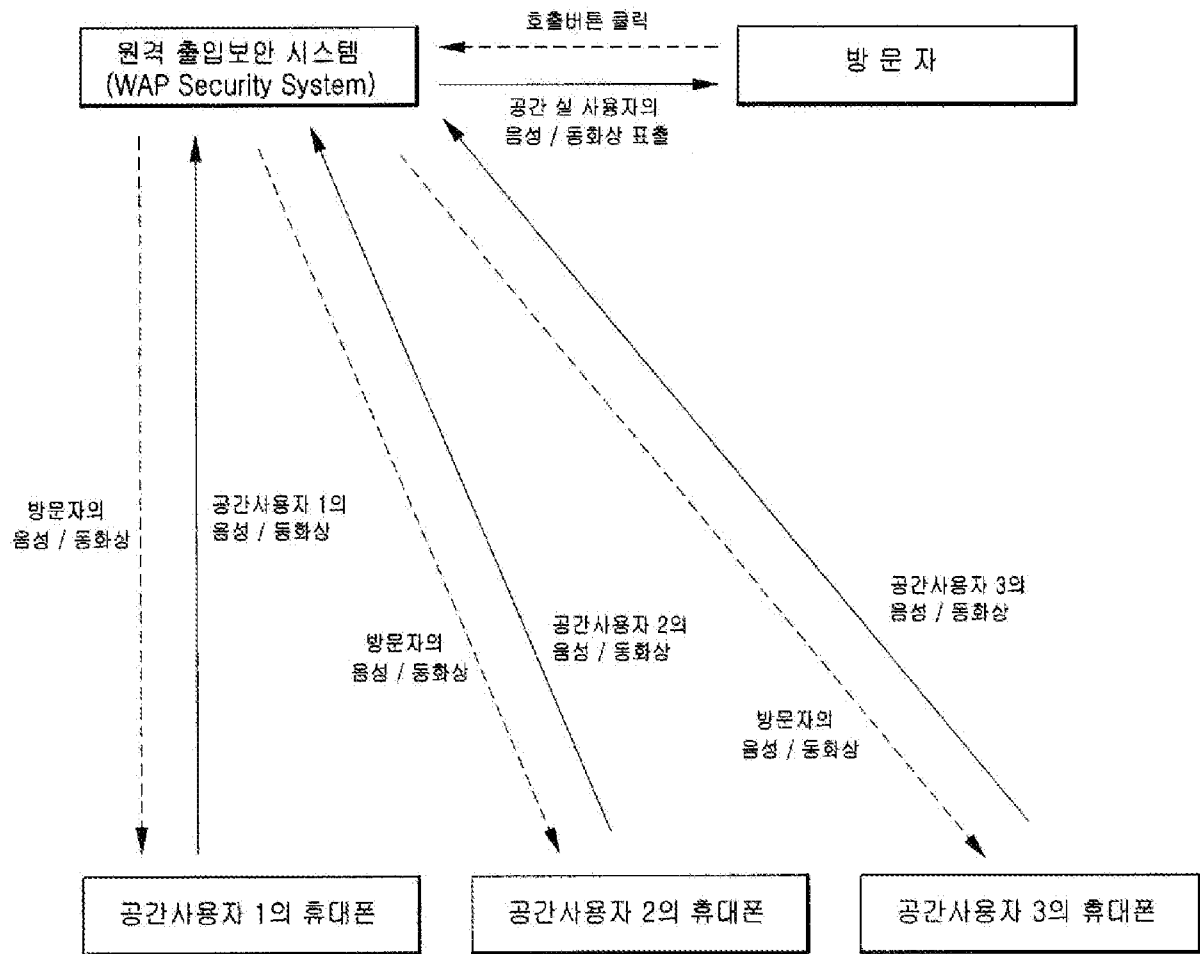


도면 4

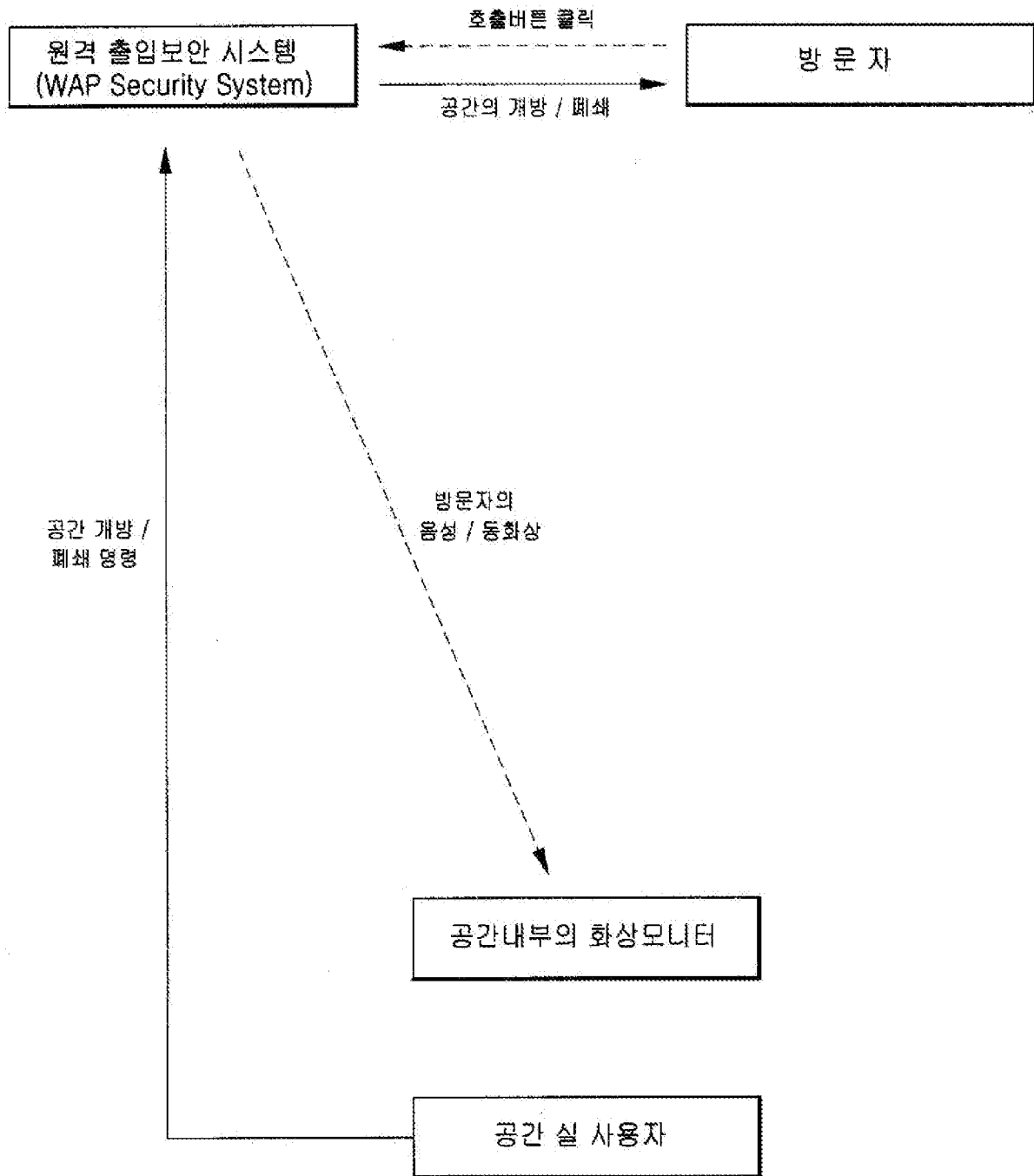


도면 5

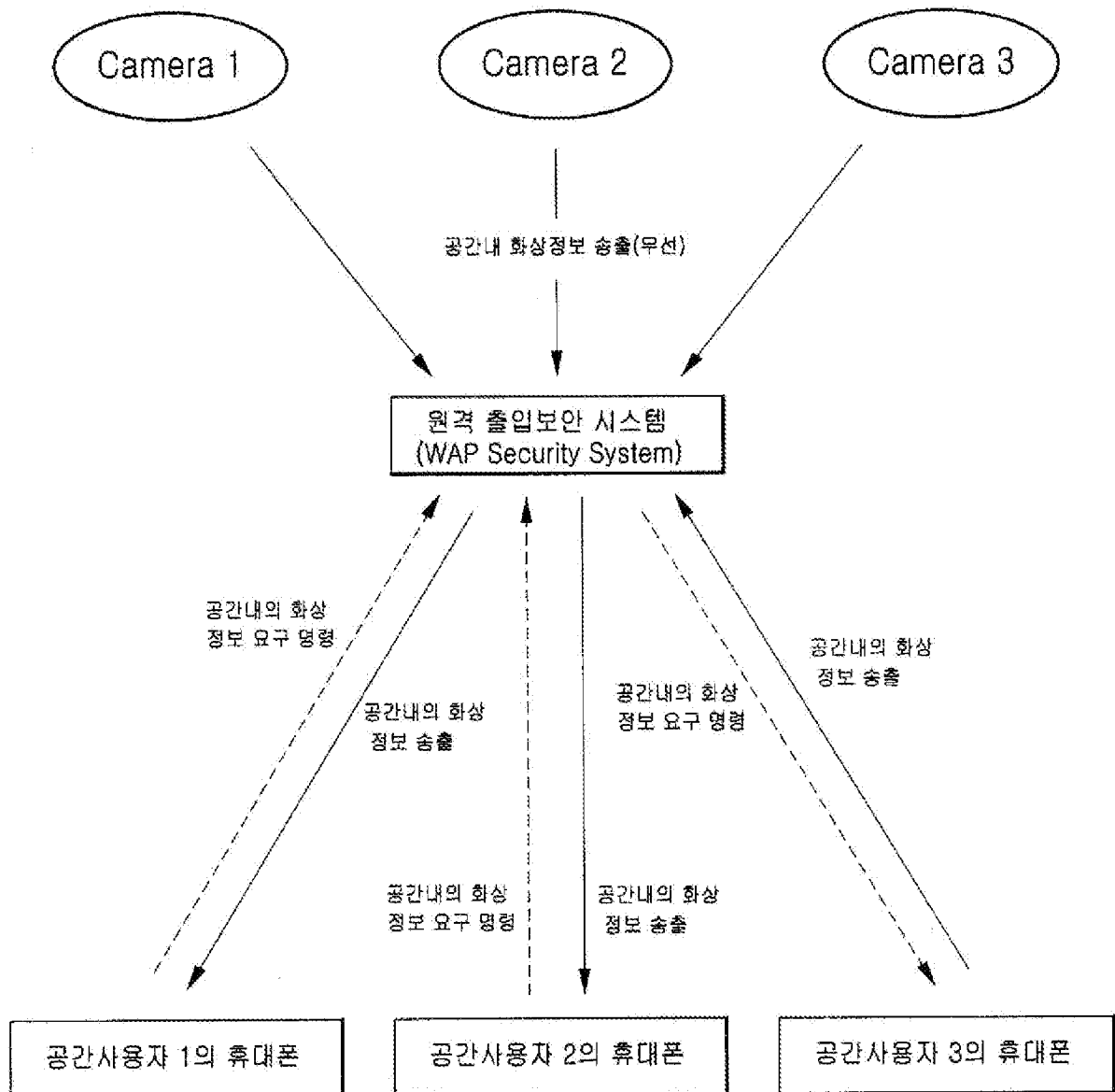
도면 6



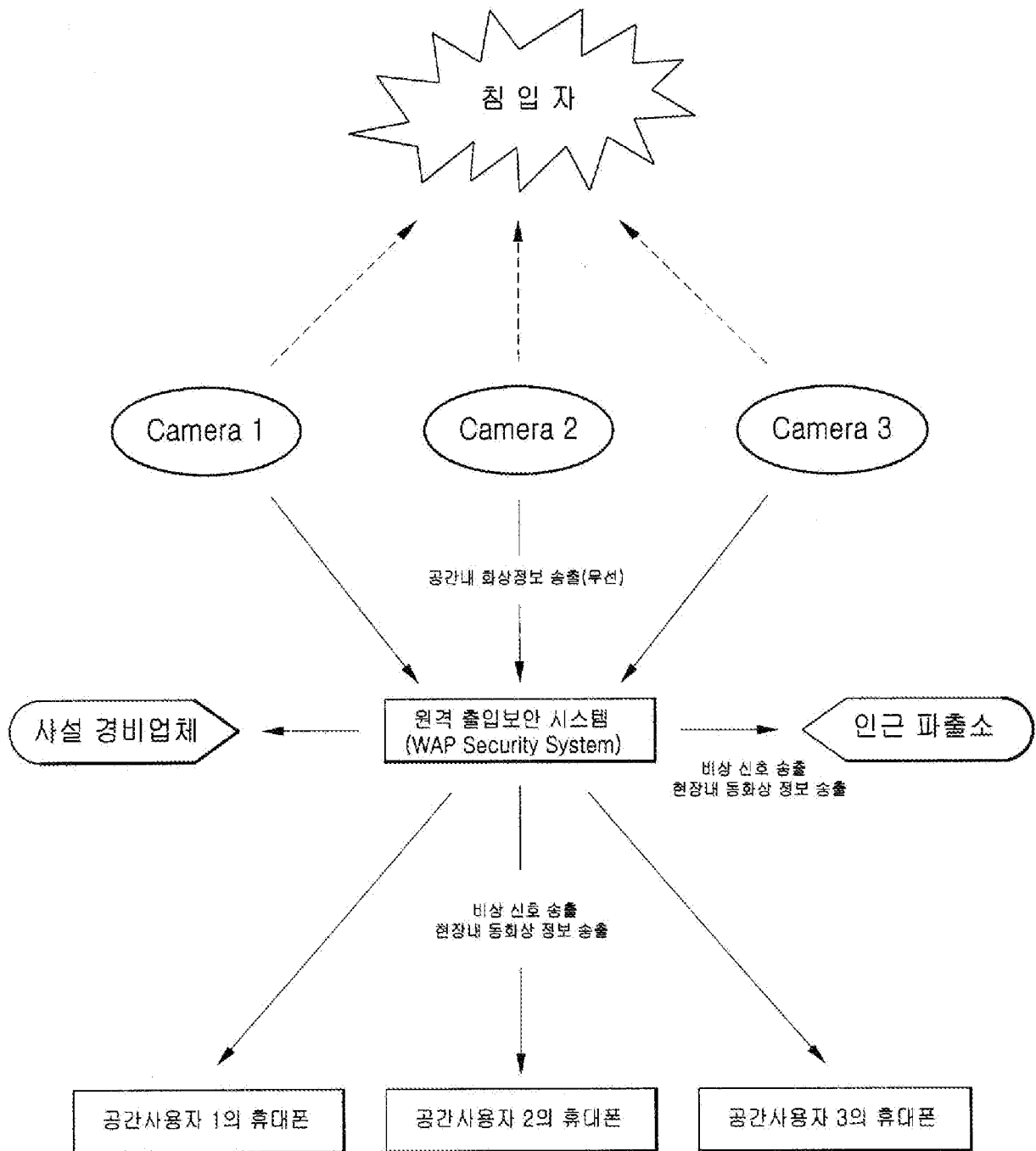
도면 7



도면 8



도면 9



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		90019542	
	Filing Date		2024-08-15	
	First Named Inventor	Duke Zinser		
	Art Unit		3992	
	Examiner Name	Nguyen, Linh M		
	Attorney Docket Number			

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	2	5828848	A	1998-10-27	MacCormack		
	3	4897630	A	1990-01-30	Nykerk		
	4	7933945	B2	2011-04-26	Krzyzanowski et al.		
	5	6385772	B1	2002-05-07	Courtney		
	6	6735387	B1	2004-05-11	Schnell		
	7	5604551	A	1997-02-18	Choi et al.		
	8	5781108	A	1998-07-14	Jacob et al.		

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Attorney Docket Number		

	9	6970183	B1	2005-11-29	Monroe	
	10	7506020	B2	2009-03-17	Ellis	

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	3	20050010649	A1	2005-01-13	Payne et al.	
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Application Number		90019542	
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Art Unit		3992	
Examiner Name		Nguyen, Linh M	
Attorney Docket Number			

	1	0038174	WO	A1	2000-06-29	Lands		☐
	2	0084277	KR	A	2003-03-04	Jae		☐
	3	0165875	WO	A1	2001-09-07	Sabie		☐
	4	0193220	WO	A1	2001-12-06	Menard		☐

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Application Number	90019542
Filing Date	2024-08-15
First Named Inventor	Duke Zinser
Art Unit	3992
Examiner Name	Nguyen, Linh M
Attorney Docket Number	

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Please see 37 CFR 1.97(e) to make the appropriate selection(s):

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☐ See attached certification statement.

☒ A certification statement is not submitted herewith.

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☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

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Signature	/Kirby Drake/	Date (YYYY-MM-DD)	2024-11-11
Name/Print	Kirby Drake	Registration Number	55126

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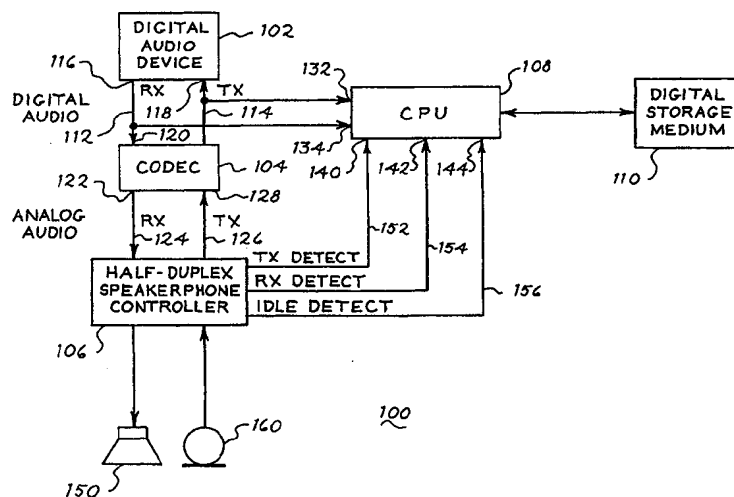
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(54) Title: METHOD AND APPARATUS FOR DECREASING STORAGE REQUIREMENTS FOR A VOICE RECORDING SYSTEM



(57) Abstract

A voice recording system for storing data from a two-way conversation, the system includes a microphone (160), a speaker (150), an audio device (102), an audio transmission controller (106), a storage device (110) and a switching circuit (108). The audio transmission controller has an input (120) and an output coupled to the audio device and an input (128) coupled to the microphone and an output (122) coupled to the speaker. The audio transmission controller provides a transmit detect signal, a receive detect signal and an idle detect signal in response to audio transmissions received at the audio transmission controller. The switching circuit is configured to store in the storage device only an active side of the conversation in response to the receive detect signal, the transmit detect signal and the idle detect signal.

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METHOD AND APPARATUS FOR DECREASING STORAGE REQUIREMENTS FOR A VOICE RECORDING SYSTEM

FIELD OF THE INVENTION

The present invention relates generally to voice recording systems. More specifically, the present invention relates to a method and apparatus for decreasing storage requirements of a voice recording systems.

BACKGROUND

Voice recording systems are used to record signals representative of speech for subsequent playback. Some such systems are analog in nature and store analog information, for example, on magnetic tape. Other systems are digital and convert analog audio information to digital form before recording digital audio data in a digital storage medium. In either an analog or a digital system, the recorded information may be retrieved and converted to signals representative of speech for audio playback.

One limitation always faced by voice recording systems is the capacity of the storage medium. The system can only store as much information or data as the storage medium can contain. This problem can often be solved by increasing the capacity of the storage medium. For example, a longer magnetic tape or a larger memory can be used. However, this may not always be feasible. In some devices, such as radiotelephones, the physical size of the device is severely limited and adding more memory is not an option. Another solution involves more efficient storage of voice information, such as by compressing the data using known data compression techniques. However, audio compression may not be feasible if the required processing power is not available, or for other reasons.

A further limitation arises in systems designed to record both sides of a two-way conversation. In one prior art system, the two audio channels (receive and transmit) are summed electrically. This can be accomplished, for example, using an operational amplifier on two analog audio signals. Alternatively, the two audio channels can be digitized and the resulting digital data combined. When one channel is idle while the other is active, the system stores the active channel information but

adds in the idle channel noise. This noise is evident upon playback of the stored audio information and degrades the quality of the audio upon playback. Filtering of the noise may be a possibility for improving the storage or playback audio quality. However, much or most of the noise is in the same frequency band as the active channel audio and cannot be effectively filtered.

Accordingly, there is a need for an improved method and apparatus for storing voice information in a voice recording system which reduces storage requirements and which minimizes degradation of audio quality by avoiding storage of idle channel noise.

SUMMARY

By way of introduction only, the present invention provides a voice processing system, which reduces storage requirements by storing only the active side of a two-way conversation. One embodiment monitors both sides of the conversation and determines which is the active side. Only that side is stored. If the conversation is idle during any period of time so that no side of the conversation is active, no information or data is stored during the idle time. This further reduces storage requirements for the system.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is first embodiment of a voice processing circuit;
FIG. 2 is a second embodiment of a voice processing circuit; and
FIG. 3 is a portion of an audio transmission controller for use in the voice processing circuits of FIG. 1 and FIG. 2.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to FIG. 1, it shows a block diagram of a voice processing circuit 100. The voice processing circuit 100 includes a digital audio device 102, a codec 104, an audio transmission controller 106, a processor 108 and a digital storage device 110. The voice processing circuit 100 further includes a speaker 150 and a

microphone 160 which provide an audio interface for conveying and receiving audible sound.

The digital audio device 102 may be any appropriate source of digital audio data. In one exemplary embodiment, the digital audio device is a digital signal processor of a radiotelephone such as a cellular telephone. In such an application, the digital audio device conveys encoded digital data between a transmit/receive circuit (not shown) and the rest of the voice processing circuit 100. The data are encoded in a format for efficient radio transmission. Various speech coding technologies, such as Algebraic Code Excited Linear Predictive (ACELP) coding are available for this purpose. The digital audio device 102 decodes the encoded data into a form usable by the voice processing circuit 100, such as pulse code modulation (PCM) digital data representative of speech. The digital audio data received on a downlink (i.e., from a remote base station at the radiotelephone) are placed on a receive data line 112 at an output 116. Digital audio data for transmission on an uplink (to the remote base station) are received at the digital audio device 102 on a transmit data line 114 at an input 118.. The digital audio device 102 encodes this digital audio data using a suitable speech coding technique such as ACELP and conveys the encoded data to the transmit/receive circuit for radio transmission.

The codec 104 is a coder and decoder of digital audio data and analog audio information. Digital audio data are received from the digital audio device 102 at an input 120 on the receive data line 112. The digital audio data are processed by the codec and analog audio information is provided at an output 122 on a receive audio line 124. The analog audio information in the illustrated embodiment takes the form of an alternating current (AC) signal suitable to drive the speaker 150 to produce audible sound recognizable as speech. Audible sound is received at the microphone and converted to analog audio information by the microphone. The analog audio information is received by the codec 104 on transmit audio line 126 at an input 128. The codec 104 encodes the analog audio information as digital audio data, for example PCM data and provides this digital audio data at an output 130 on transmit data line 114.

The audio transmission controller 106 is a duplex controller for controlling data flow in a two-way communication path. In the preferred embodiment, the audio

transmission controller 106 includes a Voice Switched Speakerphone Integrated Circuit, model number TEA1095, available from Philips Semiconductors, Sunnyvale, California. Other devices or combinations of devices may be substituted and provide similar functionality. This integrated circuit in one application provides hands-free control of an audio device such as a speakerphone. In the illustrated embodiment, the audio transmission controller 106 includes a transmit amplifier, a receiver amplifier and a duplex controller. The audio transmission controller 106 is coupled between the codec 104 and the speaker 150 and the microphone 160 for controlling flow of audio signals in the voice processing circuit. The audio transmission controller 106 produces control signals in response to the flow of audio signals. In a manner to be described in detail below in conjunction with FIG. 3, the audio transmission controller 106 provides control signals for controlling the operation of the processor 108.

The digital audio device 102, the codec 104, the audio transmission controller 106 and the speaker 150 and the microphone 160 in combination permit the processing of a two-way conversation. Digital audio data representative of speech are produced at the digital audio device 102, for example in response to encoded speech received over a radio link. The digital audio data are conveyed over receive data line 112 to the codec 104 where the data are converted to analog audio signals. The analog audio signals are conveyed over the receive audio line 124 to the audio transmission controller 106 and on to the speaker 150 for production of audible sound, completing the path for the first side of the conversation.

On the reverse side of the conversation, audible sound is received at the microphone 160 and provided as analog audio signals to the audio transmission controller 106. The analog audio signals are in turn conveyed on the transmit audio line 126 to the codec 104. The analog signals are encoded as digital audio data, such as PCM data, and communicated on the transmit data line 114 to the digital audio device 102 for subsequent transmission. This is the path for the second side of the two-way conversation.

The processor 108 is coupled to the digital audio device 102 and the digital storage device 110 for storing and retrieving digital audio data in the digital storage device 110. To this end, the processor 108 has an input 132 coupled to the transmit data line 114 and an input 134 coupled to the receive data line 112. Further, the

processor 108 has a bi-directional input/output 136 coupled to the digital storage device 110 for communicating data with the digital storage device 110. The digital storage device 110 in the embodiment of FIG. 1 is preferably a semiconductor memory device, such as a memory integrated circuit. Other storage media may be substituted.

The processor 108 further has an input 140, an input 142 and an input 144 coupled to the audio transmission controller 106 for receiving control signals from the audio transmission controller 106. The control signals are conveyed on a transmit detect line 152, a receive detect line 154 and an idle detect line 156. In the illustrated embodiment, the processor 108 is responsive to the control signals for storing in the digital storage device data representative of one side only of a two-way conversation.

To reduce storage requirements, only the active side of the conversation is stored. The active side may be on side only of the conversation or it may be, for brief periods, both sides of the conversation. The transmit detect line 152 and the receive detect line 154 provide to the processor 108 an indication of which side of the conversation is the active side of the conversation. In response to the indication, the processor 108 suspends storage of data representative of the inactive side of the conversation and stores only data representative of the active side of the conversation. Moreover, the idle detect line 156 provides an indication to the processor 108 that the conversation is idle, with neither side being active. In response to an idle detect signal on the idle detect line 156, the processor 108 suspends storage of digital data in the digital storage device 110. Also, in the preferred embodiment, in response to the indication that the conversation is idle on the idle detect line 156, the processor 108 enters a low power mode by shutting down substantial portions of the operating circuitry of the processor 108.

Since pauses in one or both sides of a conversation can be of substantial duration, the voice processing circuit 100 of FIG. 1 can substantially reduce storage requirements of the digital storage device 110. Moreover, if the processor 108 is powered down during idle times, the overall power dissipation of the voice processing circuit 100 is reduced. This is an important design goal particularly for battery-powered electronic devices such as a radiotelephone.

FIG. 1 shows an apparatus for storage of digital data representative of the two-way conversation. In most applications, manipulation and storage of digital data is preferred. Circuits including integrated circuits are well developed and for such purposes. However, in some applications, manipulation and storage of analog information may be preferable.

Accordingly, FIG. 2 shows a block diagram of a voice processing circuit 200. The voice processing circuit 200 includes a digital audio device 202, a codec 204, an audio transmission controller 206, an analog switch 208 and an analog storage device 210. The voice processing circuit 200 further includes a speaker 250 and a microphone 260 which provide an audio interface for conveying and receiving audible sound.

The voice processing circuit 200 of FIG. 2 operates similarly to the voice processing circuit 100 of FIG. 1. The digital audio device 202 operates as a source of digital audio data, such as pulse code modulated (PCM) data. The digital audio data are conveyed over a receive data line from an output 216 of the digital audio device 202 to an input 220 of the codec 204. The codec 203 decodes the digital audio data and produces analog audio signals at an output 222 on the receive audio line 224. The analog audio signals are conveyed by the audio transmission controller 206 to the speaker. In response to the audio signals, the speaker produces audible sound. This forms the path for one side of a two-way conversation.

For the other path in the two-way conversation, the microphone detects audible sound and produces analog audio signals. These analog audio signals are conveyed by the audio transmission controller 206 to a transmit audio line 226 and received by the codec 204 at an input 228. The codec encodes the analog audio signals as digital audio data, such as PCM data and conveys the digital audio data to the transmit data line 214. The digital audio device receives the digital audio data at an input 218 for subsequent processing. In this manner and similar to the embodiment of FIG. 1, the digital audio device 202, the codec 204, the audio transmission controller 206 and the speaker 250 and the microphone 260 in combination permit the processing of a two-way conversation.

The audio transmission controller 206 is a duplex controller for controlling data flow in a two-way communication path. In the preferred embodiment, the audio

transmission controller 206 includes a Voice Switched Speakerphone Integrated Circuit, model number TEA1095, available from Philips Semiconductors, Sunnyvale, California. Other devices or combinations of devices may be substituted and provide similar functionality. The audio transmission controller 206 is coupled between the
5 codec 204 and the speaker 250 and the microphone 260 for controlling flow of audio signals in the voice processing circuit 200. The audio transmission controller 206 produces control signals in response to the flow of audio signals. In a manner to be described in detail below in conjunction with FIG. 3, the audio transmission controller 106 provides control signals for controlling the operation of the analog switch 208.

10 The analog switch 208 has an input 232 coupled to the transmit audio line 226 and an input 234 coupled to the receive audio line 224. The analog switch 208 further has an input 240 and an input 242 coupled to the audio transmission controller 206. In response to control signals received at the input 240 and the input 242, the analog switch 208 stores analog audio signals in the analog storage device 210. The analog
15 switch 208 is configured to receive at an input 232 a first control signal labeled transmit detect and a second control signal labeled receive detect at an input 242. These control signals provide an indication of which side of a two-way conversation is the active side of the conversation. Thus, the analog switch 208 forms a switching circuit coupled to the digital audio device 202 and audio transmission controller 206 and configured to store in the analog storage device 210 only information
20 representative of an active side of the conversation in response to the control signals.

The analog storage device 210 may be any suitable apparatus for efficient storage of analog signals representative of audible speech. Examples include a magnetic tape or magnetic disk. The analog storage device 210 has an input 244
25 configured to receive a control signal labeled idle detect in FIG. 2. When both sides of the conversation are inactive or idle, the idle detect signal disables the analog storage device 210, thereby reducing storage requirements for the analog storage device 210.

FIG. 3 illustrates a portion of an audio transmission controller 300 for use in
30 the voice processing circuits of FIG. 1 and FIG. 2. The audio transmission controller 300 includes a duplex controller circuit 302, a first summer 304, a first comparator 306, a second summer 308, a second comparator 310 and a logic gate 312. The

circuit illustrated in FIG. 3 is configured to provide the control signals receive detect, transmit detect and idle detect required by the voice processing circuits of FIG. 1 and FIG. 2.

The duplex controller circuit 302 is preferably a Voice Switched
5 Speakerphone Integrated Circuit, model number TEA1095, available from Philips Semiconductors, Sunnyvale, California. Other devices or combinations of devices may be substituted and provide similar functionality. Operation of the duplex controller circuit 302 in a speakerphone application, which is different from the application of the present invention, will be described. The duplex controller circuit
10 302 includes two signals, a voice switch threshold (SWT) and an idle detect threshold (IDT). The voltage at SWT is derived from the circuitry inside the duplex controller circuit 302. This voltage is developed by comparing the signal envelope and the noise envelope for both channels, the receive channel and the transmit channel. By comparing these envelopes, the duplex controller circuit 302 determines whether the
15 input signal, either the transmit signal the or receive signal, contains speech or noise. In a speakerphone application, a capacitor is attached to SWT and is charged or discharged by a current source based on the active side of the conversation. If a receive signal is detected, the capacitor for the speakerphone application is charged; if a transmit signal is detected, the capacitor is discharged. If neither a transmit or a
20 receive signal is detected, the speaker phone capacitor is neither charged nor discharged and the voltage at SWT equals the voltage at IDT. In this state, the circuit is considered to be in idle mode.

In the application illustrated in FIG. 3, the voltage at SWT is compared with the voltage at IDT. Each voltage is an analog voltage and is not related to any digital
25 logic levels. Each voltage is applied to the summers, including first summer 304 and second summer 308. The first summer 304 subtracts the voltage SWT from the voltage IDT to produce a signal IDT-SWT. This is another analog voltage. This voltage is compared with a reference voltage at the first comparator 306 to produce a transmit detect signal on transmit detect line 152. Similarly, the second summer 308
30 subtracts the voltage IDT from the voltage SWT to produce a signal SWT-IDT. This voltage is applied to the second comparator 310 and compared to a reference voltage. The comparator produces a receive detect signal on receive detect line 154. In the

illustrated embodiment, the reference voltage applied to both comparators is 180 mV. However, other suitable reference voltages may be chosen.

The transmit detect signal and the receive detect signal are combined to produce the idle detect signal. The transmit detect signal and the receive detect signal are applied to the inputs of logic gate 312. In the illustrated embodiment, the logic gate 312 is a NOR gate, but other logic elements may be used instead, depending on the relative levels of the transmit detect signal and the receive detect signal. The output of the logic gate 312 is the idle detect signal, which is applied to the idle detect line 156.

The output signals from the comparators, the transmit detect signal and the receive detect signal, are binary voltages suitable for digital logic inputs to the processor 108. Similarly, the output from the logic gate 312 is a binary voltage suitable as a digital logic input signal. The transmit detect signal is applied to input 140 of the processor 108. The receive detect signal is applied to input 142 of the processor 108 and the idle detect signal is applied to input 144 of the processor 108.

In operation, the audio transmission controller 300 compares the IDT and SWT voltages. If the difference between these voltage is greater than the reference voltage, the comparators then determine whether a transmit condition exists (for example, $IDT - SWT > \text{reference voltage}$) or whether a receive condition exists (for example, $SWT - IDT > \text{reference voltage}$). If neither a transmit condition nor a receive condition exists, then the circuit indicates an idle condition. These conditions are conveyed as control signals to the processor 108. In response, the processor 108 selects a side of the conversation to convey to the storage medium for storage. In the event of the idle condition, the control signals also convey this condition and the processor 108 responds by suppressing storage of voice data or information.

The audio transmission controller 300 illustrated in FIG. 3 is configured for operation with the voice processing circuit 100 with digital voice data storage illustrated in FIG. 1. The audio transmission controller 300 may be readily modified for operation in the voice processing circuit 200 of FIG. 2.

From the foregoing, it can be seen that the present invention provides a method and apparatus for a voice recording system with reduced storage requirements. The system detects an active side of a two-way conversation and stores

data or information corresponding only to the active side. If neither side is active, the system detects this idle condition and interrupts storage of data. In this manner, storage requirements are reduced, reducing the cost, size and current drain of the overall system. Further, in the system, the noise present on the inactive side of the conversation is not stored, reducing noise present during playback and improving audio fidelity of the overall system.

While a particular embodiment of the present invention has been shown and described, modifications may be made. For example, in place of separate receive and transmit detect signals, a single binary receive/transmit signal could be provided as a control signal for indicating the active state of the two-way conversation. It is therefore intended in the appended claims to cover all such changes and modifications which fall within the true spirit and scope of the invention.

What is claimed is:

CLAIMS

1. A voice recording method comprising the steps of:
detecting a two-way conversation;
identifying an active side of the conversation and an inactive side of the
conversation; and
recording only the active side of the conversation.

2. The voice recording method of claim 1 further comprising the step of
suspending recording when both sides of the two-way conversation are inactive.

3. The voice recording method of claim 1 further comprising the steps of:
selecting a first side of the two-way conversation;
comparing a signal envelope and a noise envelope of the first side to
determine if the first side is the active side of the two-way
conversation; and
comparing a signal envelope and a noise envelope of the other side to
determine if the other side is the active side of the two-way
conversation.

4. The voice recording method of claim 3 further comprising the step of
determining that a side of the two-way conversation is inactive if amplitude of the
signal envelope does not exceed amplitude of the noise envelope by a predetermined
amount.

5. A voice processing circuit comprising:

a digital audio device operative in response to digital audio data;

a codec coupled to the digital audio device converting between analog audio signals and digital audio data;

a speaker for producing audible sound in response to an analog audio signal;

a microphone for producing an analog audio signal in response to an audible sound; and

an audio transmission controller coupled between the codec and the speaker and the microphone for controlling flow of audio signals in the voice processing circuit, the audio transmission controller producing control signals in response to the flow of audio signals;

a storage device for storing digital data; and

a processor coupled to the digital audio device and the storage device for storing and retrieving digital audio data in the storage device, the processor responsive to the control signals for storing one side only of a two-way conversation.

6. The voice processing circuit of claim 5 wherein the audio transmission controller produces as the control signals one or more transmit/receive signals indicative of an active side of the two-way conversation and wherein the processor is responsive to the one or more transmit/receive signals for storing in the storage device digital audio data corresponding to the active side of the two-way conversation.

7. The voice processing circuit of claim 6 wherein the audio transmission controller produces as the control signals a receive detect signal and a transmit detect signal, the receive detect signal indicating that the active side of the two-way conversation is received from the digital audio device and the transmit detect signal indicating that the active side of the conversation is transmitted to the digital audio device.

8. The voice processing circuit of claim 7 wherein the audio transmission controller further produces as a control signal an idle detect signal when both sides of the two-way conversation are inactive.

9. The voice processing circuit of claim 8 wherein the processor does not store any digital data in response to receipt of the idle detect signal.

10. A voice recording system for storing data from a two-way conversation, the system comprising:

- a microphone;
- a speaker;
- 5 an audio device;
- an audio transmission controller having an input and an output coupled to the audio device and an input coupled to the microphone and an output coupled to the speaker, the audio transmission controller providing a transmit detect signal, a receive detect signal and an idle detect signal in response to audio transmissions received at the audio transmission controller;
- 10 a storage device; and
- a switching circuit coupled to the audio device and audio transmission controller and configured to store in the storage device only an active side of the conversation in response to the receive detect signal, the transmit detect signal and the idle detect signal.

11. The system of claim 10 wherein the audio transmission controller is configured to provide the receive detect signal when audio received from the audio device exceeds audio from the microphone and to provide the transmit detect signal when audio from the microphone exceeds audio from the audio device.

12. The system of claim 11 wherein the audio transmission controller is configured to provide the idle detect signal when audio received from the audio device and audio from the microphone both are less than a predetermined threshold.

13. The system of claim 11 wherein the audio transmission controller produces a voice switch signal having a first range of values when the audio received from the audio device exceeds audio from the microphone and a second range of values when the audio from the microphone exceeds audio from the audio device and the audio transmission controller produces an idle signal, and wherein the audio transmission controller includes a comparison circuit for comparing the voice switch signal and the idle signal to produce the receive detect signal, the transmit detect signal and the idle detect signal.

14. The system of claim 13 wherein the audio transmission controller provides the receive detect signal, the transmit detect signal and the idle detect signal as binary signals suitable for the switching circuit.

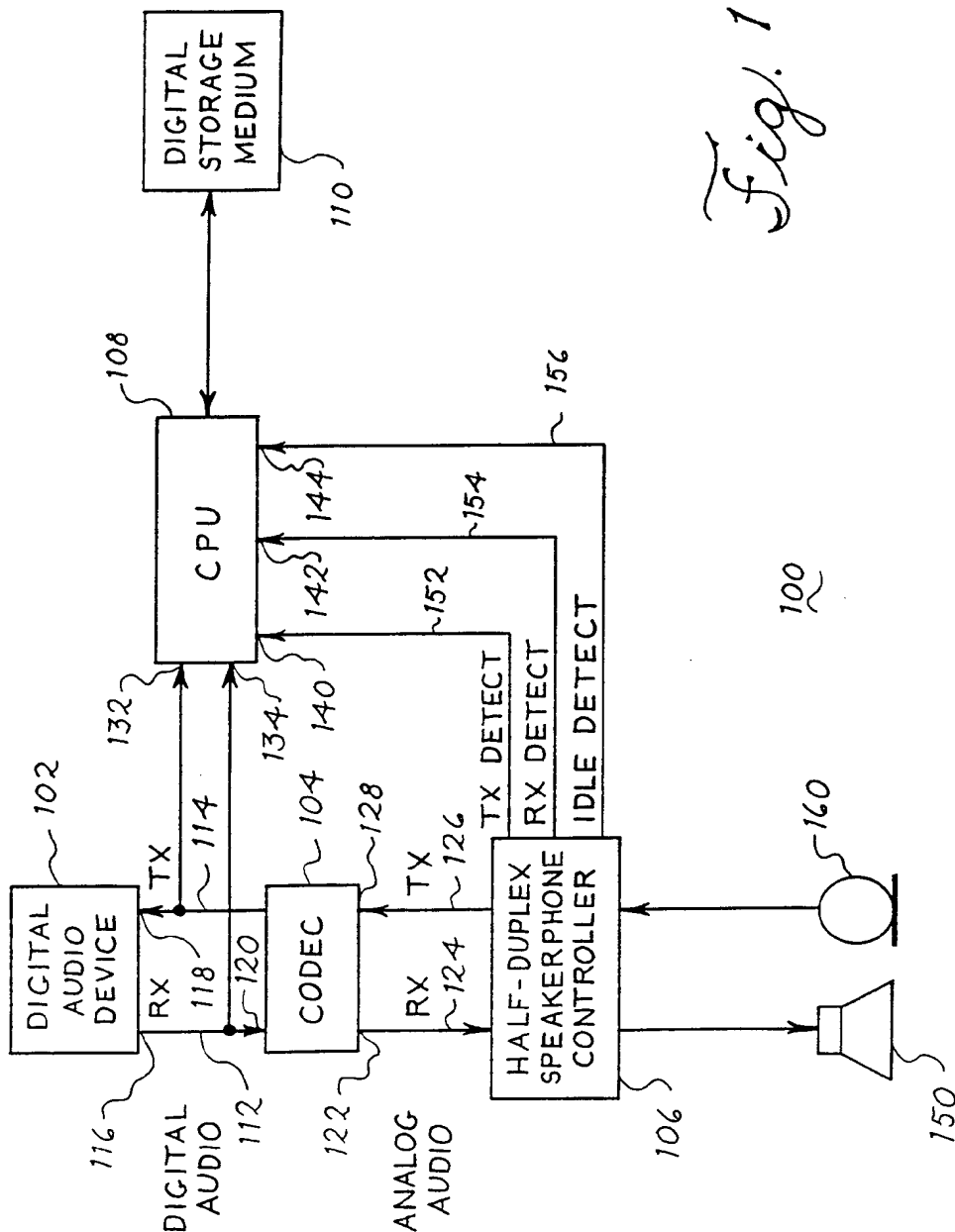
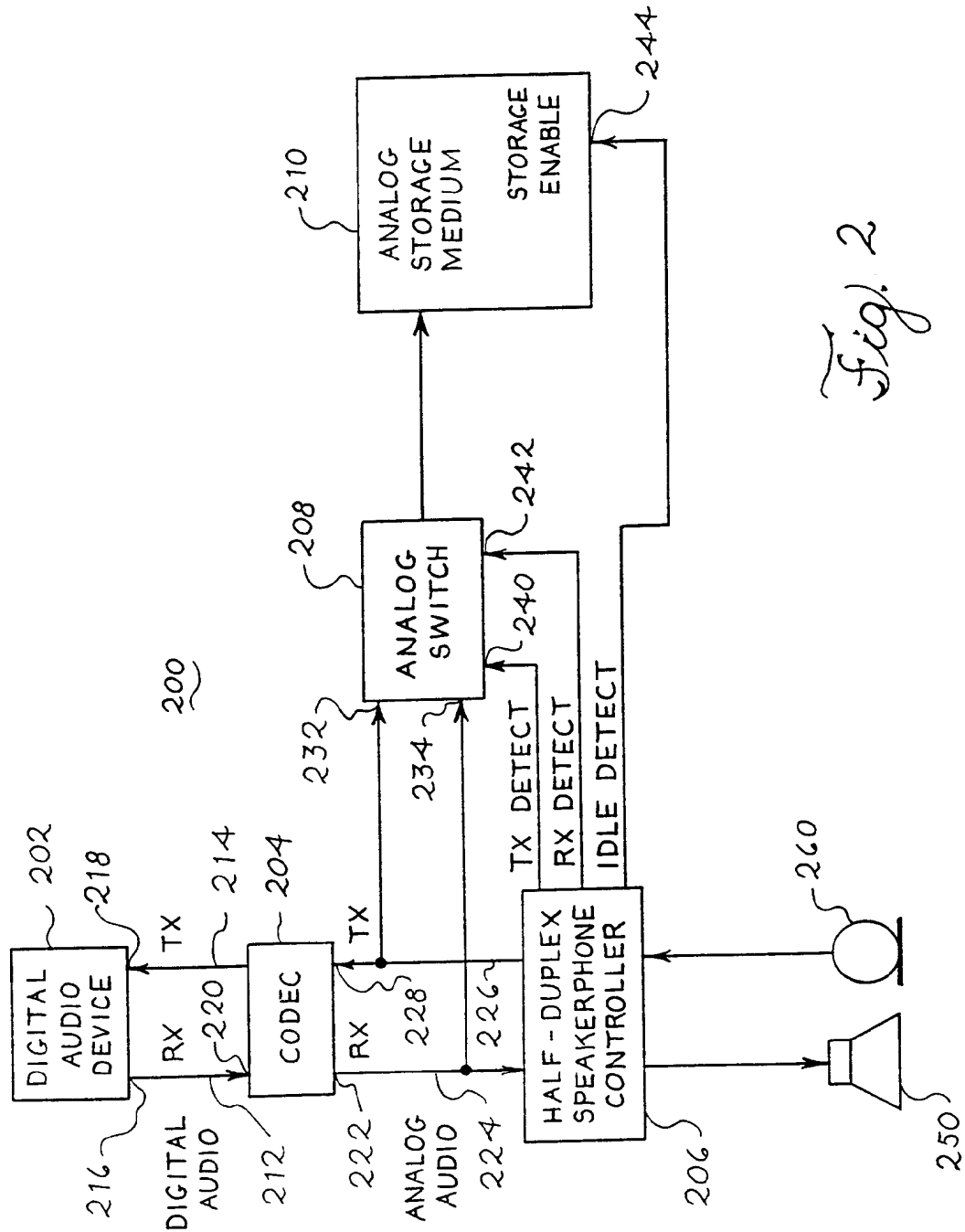


Fig. 1

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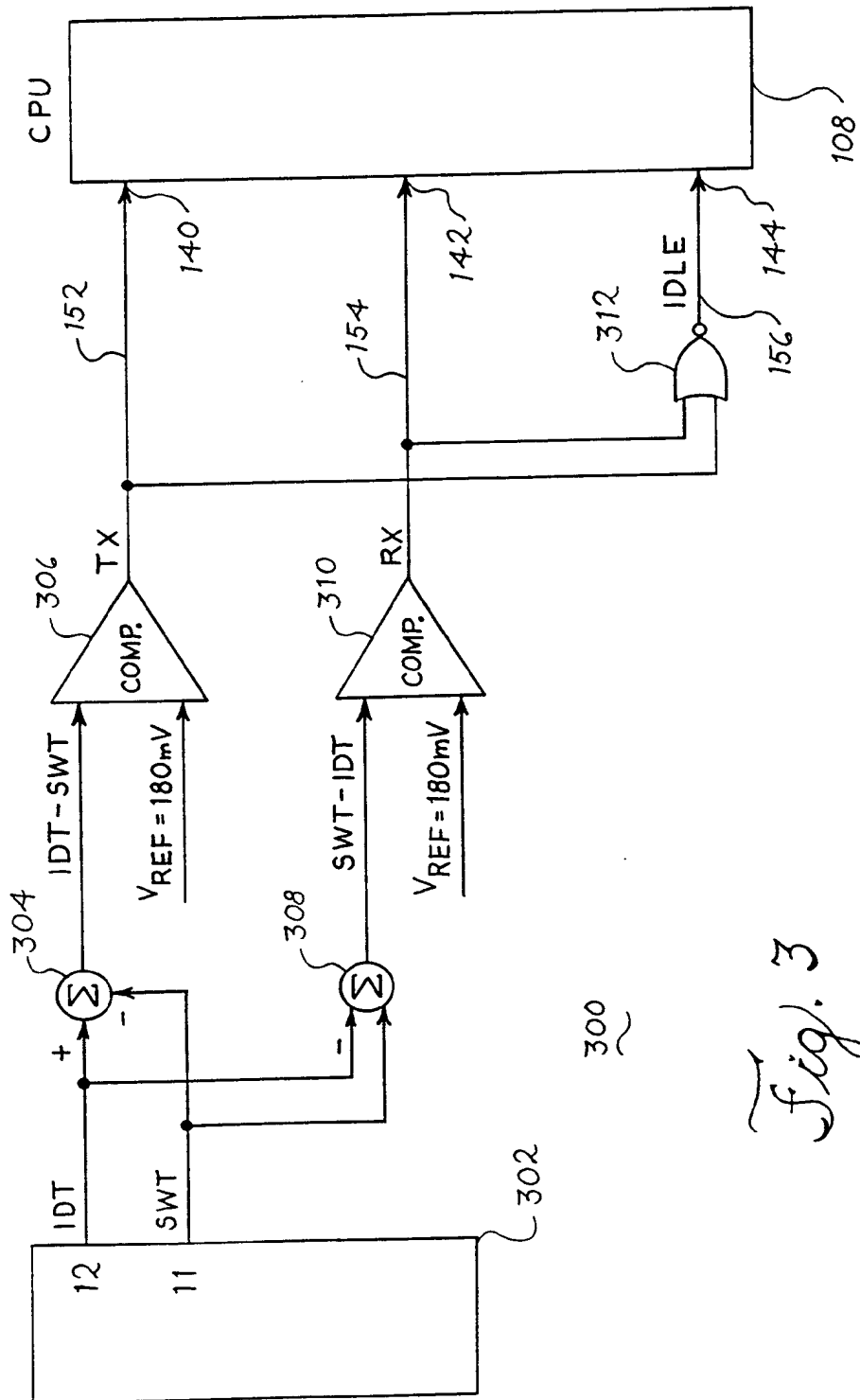


Fig. 3

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A. CLASSIFICATION OF SUBJECT MATTER
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IPC 7 G10L

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 93 13520 A (SUNDSTRAND CORP) 8 July 1993 (1993-07-08) abstract page 6, line 4 - line 20 page 7, line 3 - line 21; figure 1 page 8, line 25 - page 9, line 7 page 12, line 27 - page 14, line 14; figure 3	1,2
Y		3-14
Y	EP 0 867 856 A (KONINKL PHILIPS ELECTRONICS NV) 30 September 1998 (1998-09-30) page 2, column 1, line 9 - line 28 page 3, column 3, line 33 - line 48 — —/—	3,4

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Y	EP 0 194 785 A (STC PLC ;BRITISH TELECOMM (GB)) 17 September 1986 (1986-09-17) page 2, line 4 -page 4, line 5; claim 1; figure _____	5-14
A	CA 2 063 631 A (PHONETIX CORP) 21 September 1993 (1993-09-21) claims 1,3,4,10-12 _____	1,5,10
A	US 4 376 874 A (KARBAN STEVEN H ET AL) 15 March 1983 (1983-03-15) column 1, line 6 - line 13 column 3, line 3 - line 62; figure 1 _____	1,5,10
A	GB 2 296 170 A (IBM) 19 June 1996 (1996-06-19) page 3, line 4 - line 17 page 6, line 20 -page 7, line 8; figure 3 page 9, line 8 - line 31 _____	1,5,10

INTERNATIONAL SEARCH REPORT

information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9313520 A	08-07-1993	NONE	
EP 0867856 A	30-09-1998	JP 10274991 A	13-10-1998
EP 0194785 A	17-09-1986	GB 2172475 A	17-09-1986
		ES 552947 A	16-12-1986
CA 2063631 A	21-09-1993	NONE	
US 4376874 A	15-03-1983	NONE	
GB 2296170 A	19-06-1996	DE 69509122 D	20-05-1999
		DE 69509122 T	18-11-1999
		EP 0797883 A	01-10-1997
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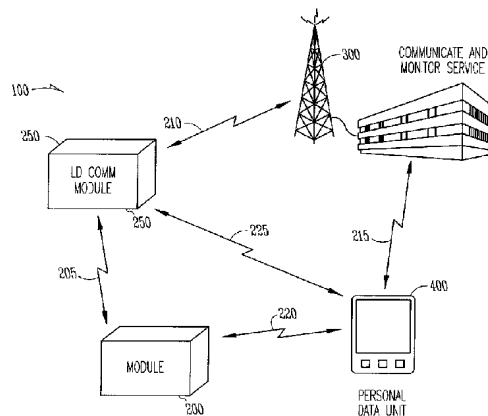
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(54) Title: MODULAR COMMUNICATION AND CONTROL SYSTEM AND METHOD



(57) Abstract: A system and method for detecting and monitoring at least one event or condition of interest. The system comprises a sensor and a wireless transmitter and receiver (150). Upon detection of an event of interest, the sensor communicates that information to the transmitter for communication to the receiver. A module with a sensor to indicate the position of a door coupled to a door opener. The module (200) is compatible with a wireless communication protocol and operates over both a long range, such as is used with a cellular telephone, and a short range, such as is used with BLUETOOTH. A door position sensor coupled to the module (200) provides information to the user over a wireless communication channel. In one embodiment, information from an additional door position sensor is wirelessly transmitted. In one embodiment, an audio transducer coupled to the module responds to voice commands to operate the door opener.

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MODULAR COMMUNICATION AND CONTROL SYSTEM AND METHOD

5

Field of the Invention

The present subject matter relates generally to communication and control systems, and in particular, to a wireless, modular, system suitable for a variety of applications, including building maintenance and control, premises security and personal safety.

Background of the Invention

The variety of separate networks that may exist in a single building creates numerous problems for those purchasing, operating, and maintaining those networks. One example of a typical network is a security system. Another network is a building management or environmental control system. Each of these networks operates using separate controllers, separate network elements, and separate power supplies. With few exceptions, the intranetwork communications of one system are not compatible with those of another system. In addition, the design and installation of such systems are usually proprietary and thus, components from one manufacturer are not compatible with those of another manufacturer. Furthermore, the bandwidth requirements for the communications within each type of network are varied. For example, a security system may require a bandwidth of approximately 1kbit/second, whereas a building management system may require 100kbit/second.

What is needed in the art is improved technology that enables portable, modular, bidirectional communication between a wide variety of devices and that satisfies the demand for a security systems and automated building controls.

Furthermore, what is needed in the art is a system enabling both safety and convenience features in an affordable, modular, arrangement that is easy to install and manage.

In addition, and for reasons of convenience and safety, many overhead garage doors are equipped with an electric door opener. Automobile drivers find it convenient to remotely open and close the overhead door without exiting their car. Homeowners also enjoy the convenience of opening the garage door with a push of a button. Often, a control button is wired directly to the opener and located on an interior surface of a garage wall. Homeowners also find that a properly installed electric garage door opener improves personal safety. Most doors are heavy and, unless operated with appropriate care, can be lethal if dropped on a child. Safety features of modern garage doors, including automatic reverse on obstruction and floor level optical sensors, provide some measure of protection against crushing a person.

However the typical garage door opener suffers from a number of problems. First, garage door openers lack any feedback to indicate the position of the door to the user. Unless the user observes complete closure of the door, there remains the possibility that the door will return to an open position after the user has driven out of view. For example, if a cat runs out of the garage moments before complete closure or if a broom handle falls in the path of the door, the opener will return the door to an open position. An unattended home with an open garage door is an easy target for a burglar. Second, in most cases, the user must use either the proprietary remote control encoded for use with the particular opener or the wired button usually affixed to a wall surface. If the remote control is unavailable, then the user is inconvenienced and forced to use other means to open the door. For example, without a remote control, the user may have to enter the garage using an alternate door or use an external switch. Third, typical garage door openers lack adequate security protection to prevent operation of the door by an unauthorized person. For example, in some cases, the wireless garage door opener access code can be stolen by a third party using code grabbing devices. Using such a device, a thief waiting near the home can copy the wireless access code and later return to burglarize the garage, and in some cases, the home.

A profile schematic of a residential garage door opener system 1000 is illustrated in Figure 30. In the figure, power unit 1500 may include an electric

motor that provides the force to open and close the garage door. Power unit 1500 may include a belt drive, a chain drive, gear train or other power transmission means to convert rotational forces to linear motion. In the typical installation, power unit 1500 is anchored securely to rafters or other ceiling structure in the garage by supporting structure 5500, which may include angle iron or other stock.

Trolley mechanism 2500 travels along track 2000 in the directions shown generally by arrow 5000. Track 2000 is attached at one end to power unit 1500 and attached at the other end to the garage structure at bracket 4500. Actuator arm 3000 is flexibly coupled to trolley 2500 on one end and flexibly coupled to garage door 4000 by bracket 3500. Door 4000 may be fabricated of wood, aluminum, steel, fiberglass or any other material and often includes multiple door panels, each of which is commonly referred to as a section, arranged in a hinged assembly. A section of door is illustrated in Figure 30. The edge of each section of garage door 4000 includes rollers. The rollers engage door tracks mounted along the sides of the door opening.

Switch 6500 is wired directly to power unit 1500 by line 7000. Switch 6500 is often mounted on a wall adjacent to a service door to the garage. Normally, when the button on switch 6500 is pressed, power unit 1500 drives door 4000 to an open position if door 4000 closed, and to a closed position if open. Electrical power to operate in this manner is drawn from line cord 6000 which is typically plugged into a nearby outlet mounted in the ceiling of the garage.

In addition to switch 6500, power unit 1500 can be operated by using remote control 8500. Control 8500 includes a wireless transmitter that broadcasts a signal to power unit 1500 by radio link 8000. In the figure, antenna 7500 is mounted on power unit 1500, however, an antenna may, instead, be located on switch 6500. Control 8500 is most often used by a driver from within an automobile. Control 8500, like switch 6500, causes power unit 1500 to drive door 4000 to an open position if closed, and to a closed position if door 4000 is open.

For the reasons stated above, and for other reasons stated below which will become apparent to those skilled in the art upon reading and understanding the present specification, there is a need in the art for systems and methods to control and manage a door opener system or other device using a controller

5 having an unlimited geographical range, interoperability with other systems, simple programming to enable easy set-up and configuration of the remote control system, and feedback indicating status or mode of operation of the opener or other device.

Summary

10 The present subject matter provides a system and method to address the aforementioned problems. In one embodiment, the present subject matter provides a security sensor and a wireless transceiver communicating using a network protocol. In one embodiment, the transceiver also retransmits communications using the network protocol. In various embodiments, the

15 transceiver is compatible with an IEEE specification, BLUETOOTH® technical specification 1.0. The sensor may include, but is not limited to, a motion sensor, a passive infrared motion detector, pressure sensor, position sensor, proximity sensor, glass breakage sensor or a video camera. Environmental sensors are also contemplated, either individually or in combination with other sensors.

20 Environmental sensors may include, but are not limited to, a temperature sensor, a gas sensor, a particulate sensor, a fluid sensor, or a sound sensor. The system may also include a control, such as, but not limited to a power control, an appliance control, an air conditioner control, a furnace control, or a ventilation control. The system may also include a an operable security device coupled to

25 the wireless transceiver. Such devices may include, but are not limited to, a lock or a siren. In one embodiment, other wireless transceivers are comprehended and enable relaying of communications. In one embodiment, the wireless transceiver communicates with a long range, bidirectional wireless network, such as, but not limited to, a telephone, a cellular telephone, a pager, a computer,

30 a personal communication service (PCS) device, a narrowband PCS device, a two-way pager, a personal data assistant. The system may be battery powered or powered by metered electric service.

In one embodiment, the system includes a security device, and a first wireless transceiver electrically coupled to the security device, wherein the first wireless transceiver monitors a plurality of radio frequencies, retransmits digital data in a digital network protocol, receives outbound data from the security device and wirelessly transmits the outbound data using the digital network protocol. Furthermore, the transceiver may be adapted for wirelessly receiving incoming digital data in the network protocol and communicating the incoming digital data to the security device. One embodiment includes a second wireless transceiver in communication with the first wireless transceiver, the second wireless transceiver adapted for monitoring the plurality of radio frequencies, receiving and retransmitting digital data in the digital network protocol, communicating outgoing data to a user, and transmitting the incoming digital data. In one embodiment, the transceiver is a spread spectrum transceiver. Either transceiver may be compatible with standards under IEEE 802.15, or compatible with BLUETOOTH® technical specification version 1.0. In one embodiment, the second wireless transceiver is electrically coupled to a user controllable communication device. In one embodiment, the user controllable communication device is in communication with a user. In various embodiments, the second wireless transceiver is coupled to a telephone line, a long range transceiver, a cellular communication network, or a narrowband personal communication system network. In one embodiment, the system is coupled to a modem or a packetized communication network, such as the Internet. Various portions of the system may be battery powered or line voltage powered.

In one embodiment, the system includes a first module and a second module. The first module may include a microprocessor controller, a lock coupled to the controller, an audio transducer coupled to the controller, the audio transducer for generating an electrical signal in response to received audio and for generating audio in response to a received electrical signal, a caller accessible identification module coupled to the controller, the caller accessible identification module for receiving caller entered information, a proximity detector coupled to the controller, the proximity detector for signaling the

presence of a caller near the exterior module; and a first wireless transceiver coupled to the controller, the first wireless transceiver transmitting a digital signal received from the controller, the first wireless transceiver monitoring a radio frequency for an incoming digital message in a network protocol and for communicating digital data in the network protocol upon receiving an incoming digital message. The second module may include a second wireless transceiver in wireless communication with the first wireless transceiver, the second wireless transceiver monitoring a radio frequency for an incoming digital message in a network protocol and for communicating digital data in the network protocol upon receiving an incoming digital message and a user accessible control panel electrically coupled to the second wireless transceiver. In one embodiment, the audio transducer comprises a speaker and a microphone. In one embodiment, the first module includes a video camera and the second module includes a video display. In one embodiment, the proximity detector comprises a doorbell button or a video camera. In one embodiment, the user accessible identification module includes a keypad, a biometrics sensor, or a card reader.

In one embodiment, the system comprises a clock and a transceiver coupled to the clock and a first control accessible to the user and coupled to the transceiver, wherein actuation of the first control effectuates one of a plurality of user selectable outputs, the user selectable outputs each coupled wirelessly to the device, and a second control accessible to the user, wherein actuation of the second control selects a time for activating the one of a plurality of user selectable outputs. In one embodiment, the outputs activate a security system or controls an environmental control, or controls a premises control. In one embodiment, the user can select an absolute time, a time relative to a predetermined time, or a default time. In one embodiment, the transceiver communicates omnidirectionally and is adapted for ad hoc networking capability.

In one embodiment, the present subject matter describes a method including receiving a request for service from a caller using an annunciator module, transmitting the request as a digital message in a wireless, premises-

based network protocol, receiving the request at a remote location using a personal communication device, and notifying a user of the device of the received request. In one embodiment, the method includes acknowledging receipt of the signal and communicating between the module and the device. In one embodiment, the method includes communicating a video image between the module and the device. In one embodiment, the method includes sending an executable command from the device, receiving the executable command at the module, and executing the instruction. In one embodiment, the method includes sending an executable command to operate a door lock.

10 In one embodiment, the method includes entering a predetermined code into a portable transmitter, transmitting the code as a digital message in a wireless, premises-based network protocol, receiving the code at a receiver coupled to an operable device, verifying authorization of the transmitted code, and operating the device. In one embodiment, the method includes unlocking a door lock or operating an electric light.

In one embodiment, the method includes detecting the position of a bolt, transmitting information corresponding to the detected position using a wireless radio frequency link in a digital, premises-based network protocol, receiving the transmitted information, and operating a security system as a function of the received information. In one embodiment, the method includes operating perimeter sensors when the bolt is detected in a first position and operating perimeter sensors and interior sensors when the bolt is detected in a second position. In one embodiment, the method includes operating a security system as a function of the bolt position and the detected video image.

25 In one embodiment, the method includes executing programming on a portable communication device, generating a visual display of options for controlling the security system, selecting operational parameters for the security system using the display, executing a command to implement the selected operational parameters, and transmitting the command and selected parameters to the security system using a wireless radio frequency link in a digital, premises-based network protocol.

In one embodiment, a system includes a transducer for generating data upon detecting a local event, a first communication module coupled to the transducer, the first communication module including a first transceiver for wirelessly transmitting transducer data in a premises-based, digital network protocol, and a second communication module for wirelessly communicating with the first communication module, the second communication module further including a second transceiver for communicating with the first communication module using the digital network protocol, and a user operable device coupled to the second transceiver, the user operable device adapted for communicating with the transducer via the digital network protocol. In one embodiment, a controllable member is operated as a function of the user operable device.

In one embodiment, the method includes detecting a user controlled action, generating encoded data as a function of the user controlled action, transmitting the encoded data to a remote facility using a premises-based, digital network protocol, receiving the encoded data at the remote facility, and initiating an emergency response as a function of the encoded data. In one embodiment, the method includes summoning fire suppression aid, summoning police service or summoning medical aid. In one embodiment, the method includes detecting a keystroke, detecting a touch screen input or detecting an audible command. In one embodiment, the method includes generating encoded data indicative of a fire emergency, a police emergency, or a medical emergency.

In one embodiment, the system includes a passive infrared motion detector and a transmitter coupled to the detector, the transmitter is compatible with BLUETOOTH® technical specification version 1.0. In one embodiment, the system includes a receiver coupled to the detector, the receiver is compatible with BLUETOOTH® technical specification version 1.0. In one embodiment, the system includes a long range communication module, the module adapted for communicating with the detector using the transmitter and further wherein the module is coupled to a long range communication network. In one embodiment, the long range communication network is a telephone network, a cellular telephone network, a radio network, a personal communication system network, or a two-way pager network.

In addition, the above mentioned problems with door openers and other problems are addressed by the present invention and which will be understood by reading and studying the following specification. A system and method is described which allows remote control and management of single or multiple
5 door openers using a wired or wireless communication device. The device may be a cellular telephone, a pager, a personal digital assistant, a computer or other device that communicates using a network.

In particular, an illustrative embodiment of the present invention includes a processor executing programming and coupled to a door opener, a position
10 sensor, and a wireless transceiver that communicates using both a long range communication protocol and a short range communication protocol. A user need not specify the communication protocol to be used in controlling or managing the opener. The opener receives commands and transmits status information using either or both of the long range and short range protocols. In one
15 embodiment, the system detects the presence of a short range protocol device, disables long range communications, and engages in short range communications with the detected device. When the distance between the device and the door opener exceeds the effective range of the short range device, the system terminates short range communications and establishes a
20 communication link using a long range communication protocol. The communication link, whether long range or short range, provides a channel for communicating information from the door opener to the device and for communicating instructions from the device to the door opener.

Position information is transmitted to the device by a transceiver coupled
25 to the processor. Other information, such as temperature or light levels, may also be transmitted to the device.

The present subject matter provides a system and method to address the aforementioned problems and others not expressly stated in this detailed description. In one embodiment, an assisted personal communication system,
30 including a two way pager or other bidirectional, long range, communication device, is used in conjunction with a response agency to coordinate a request for assistance by a user. In one embodiment, the system is used for children to

report an emergency, or other situation, and to coordinate assistance efforts by the response agency.

These and other features and advantages of the invention will become apparent from the following description of the embodiments of the invention.

5 Description of the Figures

Figure 1 is a diagram showing one embodiment of the present system.

Figure 2A is a diagram showing one embodiment of the present system.

Figure 2B is a diagram showing one embodiment of the present system.

Figure 2C is a diagram showing one embodiment of the present system.

10 Figure 2D is a diagram showing one embodiment of the present system.

Figure 3A is a diagram showing the operation of one embodiment of the long distance communication module.

Figure 3B is a diagram showing the operation of one embodiment of the long distance communication module.

15 Figure 3C is a diagram showing the operation of one embodiment of the long distance communication module.

Figure 3D is a diagram showing the operation of one embodiment of the long distance communication module.

20 Figure 4 is a diagram showing various modes of communication with one embodiment of the present system.

Figure 5 is a diagram showing communication routes within one embodiment of the present system.

Figure 6A is a diagram showing one embodiment of a personal detection unit.

25 Figure 6B is a diagram showing one embodiment of a personal detection unit.

Figure 6C is a diagram showing one embodiment of a personal detection unit.

30 Figure 6D is a diagram showing one embodiment of a personal detection unit.

Figure 7 is an isometric view of an entry door with one embodiment of the present system.

- Figure 8 is a top view of an entry door with one embodiment of the present system.
- Figure 9 is an isometric view of one embodiment of the present system.
- Figure 10 is an isometric view of one embodiment of the present system.
- 5 Figure 11 is a diagram of one embodiment of the present system.
- Figure 12 is a diagram of a portion of one embodiment of the present system.
- Figure 13 is an isometric view of one embodiment of the present system.
- Figure 14 is a view of one embodiment of the present system.
- 10 Figure 15 is an isometric view of one embodiment of the present system.
- Figure 16 is an isometric view of a portion of one embodiment of the present system.
- Figure 17 is an isometric view of one embodiment of the present system.
- Figure 18 is an isometric view of one embodiment of the present system.
- 15 Figure 19 is an isometric view of one embodiment of the present system.
- Figure 20 is an isometric view of one embodiment of the present system.
- Figure 21 is an isometric view of one embodiment of the present system.
- Figure 22 is an isometric view of one embodiment of the present system.
- Figure 23 is an isometric view of one embodiment of the present system.
- 20 Figure 24 is an isometric view of one embodiment of the present system.
- Figure 25 is an isometric view of one embodiment of the present system.
- Figure 26 is an organizational chart depicting typical applications of a modular communication system.
- Figure 27 is a diagram of one embodiment of the present system with various modes of operation.
- 25 Figure 28 is an isometric view of a computer incorporating one embodiment of the present system.
- Figure 29 is diagram depicting representative applications of a modular communication system.
- 30 Figure 30 schematically illustrates a residential garage door opener.
- Figure 31 illustrates a block diagram of one embodiment of the present system.

Figure 32 illustrates one embodiment of a transceiver in accordance with one embodiment of the present system.

Figure 33 illustrates one embodiment of a transceiver in accordance with one embodiment of the present system.

5 Figure 34 illustrates one embodiment of a power supply in accordance with one embodiment of the present system.

Figure 35 illustrates one embodiment of a processor in accordance with one embodiment of the present system.

10 Figure 36 illustrates one embodiment of programming in accordance with one embodiment of the present system.

Figure 37 illustrates one embodiment of a method in accordance with one embodiment of the present system.

Detailed Description

15 This detailed description provides a number of different embodiments of the present system. The embodiments provided herein are not intended in an exclusive or limited sense, and variations may exist in organization, dimension, hardware, software, mechanical design and configuration without departing from the claimed invention, the scope of which is provided by the attached claims and equivalents thereof.

20 An embodiment of present system 100 is depicted in Figure 1 and includes module 200, long distance communication ("LD comm") module 250, communication and monitor service facility ("facility") 300, and personal data unit ("PDU") 400. Module 200 is in wireless communication with LD comm module 250 via link 215. LD comm module 250 is also in wireless
25 communication with facility 300 via link 210 and in wireless communication with PDU 400 via link 225. Facility 300 is in communication with PDU 400 via link 215. In addition, module 200 is in wireless communication with PDU 400 via link 220 via link 220.

30 The operation of module 200, in one embodiment, is as follows. Module 200, in response to a sensed or detected condition, generates and wirelessly transmits digital data. The condition may include an event. The digital data may correspond to the magnitude of the condition or it may indicate that the event, or

condition, occurred. Other parameters or values of digital data are also possible.

The digital data transmitted by module 200 is an omnidirectional broadcast signal. In the embodiment shown in Figure 1, the signal is communicated to LD comm module 250 by wireless link 205. LD comm module 250, in turn receives the digital data, or signal, and retransmits the signal on a long range communication channel. The long range communication channel may be an omnidirectional radio broadcast, a wired network or any other type of long range communication channel. In the embodiment shown, LD comm module 250 retransmits, or rebroadcasts the signal to facility 300 via wireless radio link 210.

10 In other embodiments, the signal is rebroadcast via a land line, a satellite link, or a combination of links and such examples are exemplary of all links contemplated herein. Figure 1 also depicts LD comm module 250 in communication with PDU 400 via link 225. LD comm module 250, and thus, link 225, may communicate using a two-way pager network, in which case, PDU

15 400 is a two-way pager. Alternatively, PDU 400 receives communication from facility 300 using link 215.

Having received the digital data transmitted by module 200, PDU 400 displays or renders the information in a manner useful to a person carrying PDU 400. In one embodiment, PDU 400 provides an audible signal to a user. In one

20 embodiment, PDU 400 generates and displays graphical or textual information for the benefit of a user. In one embodiment, PDU 400 generates a tactile signal.

One embodiment of the present system allows a user carrying PDU 400 to interact with module 200 using wireless links 205, 220, or 215. Additional features and functionality of system 100 are described below.

25 Figure 2A, 2B, 2C and 2D provide additional view of embodiments of module 200. As shown in the figures, module 200 includes two or more components. In Figure 2A, module 200 includes device 140A coupled to transceiver 150. Transceiver 150 includes a receiver and a transmitter to enable wireless communication with device 140A. In one embodiment, device 140A

30 generates a signal that is coupled to transceiver 150. In one embodiment, device 140A responds to signals generated by transceiver 150.

Figure 2B depicts module 200 having transceiver 150 coupled to sensor 140B. In one embodiment, sensor 140B includes a security sensor such as a motion detector, a door position sensor, or a video camera. Sensor 140B, in one embodiment, includes an environmental sensor such as a temperature probe or gas detector. Sensor 140B may be an event detection sensor or parameter detection sensor. An event may include such discrete events as unauthorized intrusion, power failure, or fire. Parameters may relate to levels of gases or fluids, temperature, rate of change of temperature or any other measurable value. Examples of sensors include a video camera, a security system door or window contact, a gas detector (such as carbon monoxide), smoke detector, or audio microphone.

In Figure 2C, module 200 includes actuator 140C coupled to transceiver 150. Actuator 140C, in one embodiment, includes a solenoid actuator. Actuator 140C may include an operable component such as a transducer or other type of electromechanical device. An actuator may include a deadbolt or solenoid-type device, actuation of which results in a mechanical change in another apparatus. A transducer may include a siren, bell or other sounding device. Other types of actuators are also comprehended, including a sounding device or a relay. In Figure 2D, module 200 includes transceiver 150 coupled to sensor and actuator 140D. Sensor and actuator 140D, in one embodiment, includes a combination of a sensor and an actuator, as herein described. In the embodiment shown, transceiver 150 communicates with both elements of sensor and actuator 140D. In other words, transceiver 150 receives and transmits sensed information as well as operating an actuator.

Transceiver 150 of module 200, in one embodiment, is a wireless transceiver utilizing BLUETOOTH® communication technology. BLUETOOTH® is a trademark registered by Telefonaktiebolaget LM Ericsson of Stockholm, Sweden and refers to short range communication technology developed by an industry consortium known as the BLUETOOTH® Special Interest Group. BLUETOOTH® operates at a frequency of approximately 2.45GHz, utilizes a frequency hopping (on a plurality of frequencies), spread spectrum scheme, and provides a digital data transfer rate of approximately

1Mb/second. In one embodiment, the present system includes a transceiver in compliance with BLUETOOTH® technical specification version 1.0, herein incorporated by reference. In one embodiment, the present system includes a transceiver in compliance with standards established, or anticipated to be established, by the Institute of Electrical and Electronics Engineers, Inc., (IEEE). The IEEE 802.15 WPAN standard is anticipated to include the technology developed by the BLUETOOTH® Special Interest Group. WPAN refers to Wireless Personal Area Networks. The IEEE 802.15 WPAN standard is expected to define a standard for wireless communications within a personal operating space (POS) which encircles a person. In one embodiment, the transceiver is a wireless, bidirectional, transceiver suitable for short range, omnidirectional communication that allows ad hoc networking of multiple transceivers for purposes of extending the effective range of communication. Ad hoc networking refers to the ability of one transceiver to automatically detect and establish a digital communication link with another transceiver. The resulting network, known as a piconet, enables each transceiver to exchange digital data with the other transceiver. According to one embodiment, BLUETOOTH® involves a wireless transceiver transmitting a digital signal and periodically monitoring a radio frequency for an incoming digital message encoded in a network protocol. The transceiver communicates digital data in the network protocol upon receiving an incoming digital message. Referring again to the figure, the wireless transceiver enables remote communication with the sensor or actuator of module 200.

In general, the effective communication range of BLUETOOTH® is relatively short, often characterized with a maximum range of approximately 10 meters. The short range capabilities of BLUETOOTH® are suitable for premises-based applications, such as data exchange within a range roughly equal to the lineal boundaries of a typical property, or premises. However, communication can be extended beyond this range by a number of different methods.

Figure 3A depicts a method for extending the range of a BLUETOOTH® device involving a long distance communication module, LD comm module 250.

In the figure, module 200 transmits a BLUETOOTH® signal, depicted as link 205, to LD comm module 250. In one embodiment, PDU 400 communicates with a wireless link 225 to LD comm module 250. In one embodiment, link 225 may include a BLUETOOTH® connection, a cellular telephone network, a
5 narrow band personal communication systems (“PCS”) network, a CELLEMETRY network, a narrow band trunk radio network or other type of bidirectional wireless communication link. Examples of PCS technology includes Code-Division Multiple Access (CDMA by Qualcomm Inc.), ReFLEX (by Motorola), Time Division Multiple Access (TDMA), Global Systems for
10 Mobile communications (GSM) or others. LD comm module 250 serves a relay function to extend the range of communications for module 200 or to extend the range of communications for PDU 400.

Figure 3B depicts LD comm module 250 coupled by link 210 to radio frequency (RF) tower 300A. RF tower 300A may provide frequency modulation
15 (FM) transmission, satellite transmission capabilities, or other wireless link capabilities. In Figure 3C, LD comm module 250 is coupled by link 210 to network 300B. Network 300B may include wired telephone service, such as plain old telephone service (“POTS”) or public switched telephone network (“PSTN”), fibre communication network, or other such network. In Figure 3D,
20 LD comm module 250 is coupled to both RF tower 300A, via link 210A, and network 300B, via link 210B. Other types of networks are also contemplated.

Figure 4 depicts various communication linkages possible using LD comm module 250. Link 225A represents a two-way pager network communicating with PDU 400, depicted herein as a pager device. Link 225B
25 represents a cellular network communicating with PDU 400, depicted herein as a cellular telephone. Link 210C represents a connection to modem 300C. Modem 300C may include a dial-up modem, an asynchronous digital subscriber line (“ADSL”) modem, an integrated services digital network (“ISDN”) modem or other type of modem. Link 210D represents a telephone communication
30 network and includes telephone 300D. Link 210E represents a network connection depicted as network 300E. It will be appreciated that in Figure 4,

numerous communications linkages are depicted and in any one embodiment, one or more of the various communication linkages depicted may be utilized.

Alternative means of communicating over long distance are also contemplated. In one embodiment, the long distance network may include a cellular telephone network. A user with a cellular telephone, or other cellular device, is then able to communicate with the BLUETOOTH® device as though the user was local. The long distance network may include communications using a control channel. One such example is CELLEMETRY®. CELLEMETRY® is a registered trademark of Cellemetry LLC of Atlanta, Georgia, USA, and enables digital communications over a cellular telephone control channel. Other examples of communication technology are also contemplated, including MicroBurst™ technology (MicroBurst™ is a trademark of Aeris.net, Inc.) or short message service (SMS). In one embodiment, the long distance network may include a pager network. In one embodiment, the pager network is a two-way pager network enabling bidirectional communication between a BLUETOOTH®-enabled sensor, or device, and a user controlled pager. In one embodiment, the long distance network includes a narrow band Personal Communication System network. In one embodiment, the long distance network may include a telephone network. The telephone network may include communicating using an intranet or the Internet. Coupling to such a network may be accomplished, for example, using a variety of connections, including a leased line connection, such as a T-1, an ISDN, a DSL line, or other high speed broadband connection, or it may entail a dial-up connection using a modem. In one embodiment, the long distance network may include a radio frequency or satellite communication network. In addition, one or more of the aforementioned networks may be combined to achieve desired results.

The present system also contemplates various method of control. One example of control is known as dual-tone multi-frequency (DTMF) or touch-tone control. Another example is voice-actuated control wherein the system is responsive to spoken words. Other examples, or combinations, are also contemplated. For example, a system may transmit in one direction using SMS and yet receive communications in another direction using Microburst.

The BLUETOOTH® standard facilitates connectivity, and thus, range extension by coupling a plurality of BLUETOOTH®-enabled devices together. Figure 5 depicts the interconnectivity of several BLUETOOTH®-enabled devices. In this method, a wireless network is established that enables one BLUETOOTH® device to communicate with a second BLUETOOTH® device, effectively extending the range of the first device. The second device serves as a repeater, or relay, and receives and retransmits the BLUETOOTH® signal. By this method, a plurality of BLUETOOTH® devices can be daisy-chained together to achieve a desired range. For example, a single BLUETOOTH® transceiver is often described as having a short range, typically 10 meters (and up to 100 meters), and by combining a plurality of transceivers in a network, the range can be extended. Figure 5 portrays a system having modules 200A, 200B and 200C and LD comm module 250 and PDU 400. In the embodiment shown, modules 200A, 200B and 200C and LD comm module 250 are BLUETOOTH®-enabled, and thus links 202A, 202B and 202C as well as 205 are BLUETOOTH®-communication links. In one embodiment, PDU 400 is also BLUETOOTH®-enabled and thus, link 225 is a BLUETOOTH® communication link as well. In one embodiment, PDU 400 and LD comm module 250 communicate using a long range bidirectional wireless communication network.

An example of the operation of system 100 follows in which module 200A includes a motion detector sensor coupled to a transceiver. Motion detected by the sensor of module 200A is digitally encoded and transmitted by a BLUETOOTH® communication channel. In the embodiment shown, module 200C is positioned within the broadcast range of module 200A, and LD comm module 250 is positioned beyond the range of module 200A. In this case, module 200C receives the signal from module 200A and subsequently relays the digital signal to LD comm module 250. LD comm module 250, in turn, relays the digital signal, using long distance network represented herein by link 225, to PDU 400. The foregoing example describes an embodiment wherein, for example, module 200A is a first motion detector positioned at a front entry door of a residence, module 200B includes a second motion detector positioned at a

rear entry door, module 200C includes a smoke detector positioned in a central hallway, LD comm module 250 is coupled to a twisted-pair telephone network and positioned in the basement, and PDU 400 is a two-way pager device carried by a user at a remote location. In this example, the user can add modules and LD
5 comm modules without regard for the connectivity or overall system design. The self-awareness feature and networking attributes of the BLUETOOTH® technology enable simplified system development and automatically provide range extension for communication linkages.

PDU 400 is a portable communication device operable for
10 communicating digital data and having means for receiving data on a wireless link, displaying or signaling received or generated data, as well as receiving a user controlled input and transmitting data corresponding to the user controlled input. In one embodiment, PDU 400A is a two-way pager (Figure 6A). In one embodiment, PDA 400B is a cellular telephone (Figure 6B). In one
15 embodiment, PDA 400C is a personal data (or digital) assistant (Figure 6C) and is commonly referred to as a PDA. Suitable PDAs include those marketed as PalmVII by Palm Computing of Santa Clara, California, USA. In one embodiment, PDA 400D is a personal communication device (Figure 6D). PDU
20 400 may also be a portable computer, such as a laptop or palmtop computer (not shown). Upon reading and understanding this description, one of ordinary skill in the art will recognize that PDU 400 includes a processor suitable for managing the transmission and communication functions of the present system.

It will be appreciated by one of ordinary skill in the art that, in one embodiment, one or more PDU 400 devices may be employed in a single
25 installation. Furthermore, suitable encoding of the communication signal will enable custom notification wherein a first group of one or more PDU 400 devices receives and communicates notification for predetermined events sensed by module 200 while a second group of one or more PDU 400 devices does not communicate notification to a user.

30 One embodiment of present system 100 is shown in Figure 7 which depicts entry door 260 of a residence. Entry door 260, is equipped with lock 275, handle 280 and module 200D mounted on the exterior of the residence and

proximate to entry door 260. Also shown in Figure 9 is entry light 265 for illuminating the entry area, including entry mat 285. In one embodiment, module 200 is in wireless communication with other devices, or PDU 400B, shown in the figure as cellular telephone, via link 220A, and PDU 400A, shown in the figure as a two-way pager, via link 220B. Exterior module 200D is also in wireless communication with base 250A. As depicted herein, base 250 includes LD comm module as well as user operable controls and display to enable programming and operation of system 100. In one embodiment, the wireless communication between module 200D and base 250A includes BLUETOOTH® communication technology. As previously described, module 200D, in one embodiment, is in wireless communication with PDU 400B, via link 220B, base 250A, via link 205, or PDU 400A, via link 220A.

In operation, a caller at entry door 260 can initiate communication with a user via a PDU. For example, in one embodiment, a caller arriving at locked door 260 can operate module 200D in much the same way as a doorbell, that is, by activating a prominent and conspicuous button. Module 200D then encodes and communicates a digital message for transmission to PDU 400. The digital message may be communicated directly from module 200 to PDU 400B, for example, either directly (via link 220B), or indirectly, via LD comm module 250A. In one embodiment, the communication to, and from, module 200D involves a BLUETOOTH® channel. In this example, the user receives notification of the presence of the caller by means of PDU 400B. The user, and PDU 400B, may be located inside the residence, in which case a direct connection using link 220B may be possible. Alternatively, the user, and PDU 400B, may be located outside of the residence, in which case, an indirect link, including link 205 coupling the LD comm module 250A may be employed. In either case, the caller is unlikely to perceive the actual location of the user. Furthermore, by way of operating the controls or a numeric keypad on PDU 400B, the user may control the operation of entry light 265 or lock 275 and thereby grant access to the premises for the caller.

Figure 8 depicts a top view of one embodiment of the present system as installed at an entry door 260 of a residence. Door 260 is positioned in door frame 258 and includes exterior door knob 282 and interior door knob 284. The installation also includes exterior module 200D and interior module 200E.

- 5 Exterior module 200D includes video camera 370, exterior keypad 305 and an intercom. Other sensors or detector modules are also contemplated as part of exterior module 200D, such as, for example, a doorbell. Interior module 200E includes interior motion detector/video camera 310, light switch 315 and keypad/control 320. Door 260 is also fitted with deadbolt lock 275 (or door bolt)
- 10 and door contact 290. Floor mat 285 is shown for purposes of clarity.

- In one embodiment, a caller standing in the vicinity of entry mat 285 signals their arrival by actuating a doorbell button, incorporated in exterior module 200D, in the customary manner. In one embodiment, arrival of the caller is detected by video camera 370. In response to actuation of the button, or
- 15 detection by camera 370, exterior module 200D transmits a wireless signal. In one embodiment, the wireless signal is transmitted using a BLUETOOTH® communication channel. The signal is communicated to PDU 400 (not shown in this figure). A user, equipped with PDU 400 can respond in a number of ways. In one embodiment, the user may elect to open an audio communication channel
- 20 by entering a command using PDU 400. Upon opening an audio communication channel, the caller and user can engage in bidirectional verbal discourse. In one embodiment, the user may opt to receive a graphical image of the caller using PDU 400. Entry of an appropriate command causes exterior module 200D to capture an image using exterior video camera 370 and transmit said image to
- 25 PDU 400. The graphical image may include a still image or real-time video images. In one embodiment, a user at a remote locations can enter a command at PDU 400 to cause deadbolt 275 to engage or disengage. In one embodiment, one or more of the aforementioned operations are available using PDU 400.

- In one embodiment, the aforementioned communications with exterior
- 30 module 200D can be performed using interior module 200E in lieu of PDU 400. Both exterior module 200D and interior module 200E communicate using a BLUETOOTH® communication channel and thus are able to engage in direct

communication when mounted sufficiently close to each other. Also, like PDU 400, interior module 200E can control the operation of the exterior module 200D as well as the deadbolt lock 275 and camera 370.

One embodiment of exterior module 200D of the present system, having
5 doorbell button 325 and keypad 305 is depicted in Figure 9. Exterior module 200D includes alpha-numeric keypad 305 for receiving coded information. For example, in one embodiment, an authorized callers can enter a predetermined code sequence to cause deadbolt lock 275 (Figure 8) to engage or disengage. Also, a user can enter a code sequence in PDU 400, for wireless transmission to
10 exterior module 200D, and operate deadbolt lock 275. In one embodiment, module 200D includes a card reader for receipt of identification information from a caller. The card reader may include a smart-card reader or a magnetic card reader.

Wireless transmissions with exterior module 200D are communicated
15 using transceiver 150D. In one embodiment, a code sequence entered using alphanumeric keypad 305 or PDU 400 can operate entry light 265 (Figure 7) or other devices or appliances. Exterior module 200D also includes video camera 370. In one embodiment, images captured using camera 370 can be transmitted to other devices, including PDU 400 or interior module 200E (Figure 8) or base
20 250A (Figure 7). In one embodiment, exterior module 200D includes intercom 330 for conducting intercom, or audio communication functions. In one embodiment, intercom 330 includes an audio transducer. In one embodiment, intercom 330 includes a speaker and a microphone.

In one embodiment, exterior module 200D is of a size and configuration
25 to fit within scheduled electric boxes or fixtures. In one embodiment, the power to operate exterior module 200D is derived from the metered electric service already available at the electric box in which module 200D is mounted. In one embodiment, module 200D is battery operated.

Figure 10 depicts one embodiment of interior module 200E having
30 intercom 335, push-to-talk ("PTT") switch 320, interior motion detector/video camera 310, transceiver 150E and light switch 315. Intercom 335, in conjunction with PTT switch 320, enables bidirectional wireless communication.

Intercom 335 can be adapted to communicate with exterior module 200D, PDU 400, base 250A (Figure 7) or other compatible device. Similarly, detected motion or video images captured by camera 310 can be communicated with PDU 400, base 250A, or other compatible device. In one embodiment, interior
5 module 200E is of a size and configuration to fit within scheduled electric boxes or fixtures. In one embodiment, power for interior module 200E is derived from the metered electric service already available at the electric box in which module 200E is mounted. In one embodiment, power is supplied by a battery. In one embodiment, switch 315 operates a household light, power outlet or other
10 appliance.

In one embodiment, the present system can arm or disarm a security system as a function of an image captured by video camera 370 (Figure 8), data received from deadbolt lock 275, or door contact 290. For example, in one embodiment, when door 260 is closed, as determined by contact 290, or the
15 deadbolt 275 is engaged, and the image captured by camera 370 corresponds to an authorized user or caller, then transceiver 150D (Figure 9) sends a signal, on a wireless link, to other modular security system components (such as base 250A, Figure 7), causing perimeter security system components to be armed and interior security system components to be disarmed. Alternatively, when the
20 sensors associated with module 200D, or 200E, indicate the absence of an authorized caller or user, then in one embodiment, both the interior and exterior security system sensors are activated. In one embodiment, deadbolt 275 includes a plunger-type switch to sense the bolt position. Modular security system components are described in a subsequent section of this document.

Figure 11 depicts one embodiment of the present system. In the embodiment shown, the system includes alarm clock and display 340. Devices other than an alarm clock are also contemplated, as, for example, a cordless telephone with display. The alarm clock of Figure 11 is typically positioned in a sleeping room and, thus, is convenient for managing and controlling home
30 devices and appliances, as well as providing easy communication with other modules. Module 200F includes display 340 and user operable control buttons 342, 344 and 346. Module 200F is operable as an ordinary alarm clock having a

digital display of the time appearing on display 340. Control buttons 342, 344 and 346 are operable for setting the current time as well as an alarm time. Module 200F is powered by metered service, internal battery, or both. Module 200F includes a wireless transceiver for control of, or communication with, other wireless modules. In one embodiment, the wireless transceiver operates using BLUETOOTH® communication technology. In Figure 11, module 200F is shown in communication with coffee maker 200G via wireless link 202G, television 200H via wireless link 202H, and furnace 200K, via wireless link 202K and air conditioner 200J via wireless link 202J. In one embodiment, coffee maker 200G, television 200H, furnace 200K and air conditioner 200J are equipped with wireless communication modules. In one embodiment, coffee maker 200G, television 200H, furnace 200K and air conditioner 200J are coupled to a suitably equipped outlet, as described subsequently with regard to Figure 18 or other interface module incorporating the present system.

Module 200F includes suitable programming for the control of such modules. In one embodiment, a user can operate control buttons 342, 344 and 346 to cause module 200F to display, using display 340, a menu of control options concerning each of the various modules. In one embodiment, operation of button 342 enables selection of a desired output device for control by module 200F. For example, the user can select to control coffee maker 200G and furnace 200K by manipulation of control 342. In one embodiment, a coffee maker menu appears in display 340. Again, using buttons, 342, 344 and 346 a user can program the system to cause the coffee maker to perform desired functions according to a programmed schedule. In one embodiment, second button 344 enables a user to select a time for control or operation of the desired output. For example, a user can select to operate a selected output device according to an absolute time. In other words, a user can choose to brew coffee using coffee maker 200G every day at 9:00 AM or other desired time. Button 344 also allows a user to select a relative time for operating a selected output device. For example, a user can configure module 200F to cause the furnace to seek a temperature of 68 degrees Fahrenheit every day at 30 minutes prior to the wake-up alarm setting. As another example, a user can configure the system to

begin brewing coffee thirty minutes prior to sounding the wake-up alarm, and also shut off the power to the coffee warming element 120 minutes after sounding the wake-up alarm. Button 344 also enables a user to select a default, or pre-programmed time for operating a selected appliance. For example, the
5 manufacturer may have configured module 200F to operate a selected output device daily at 8:30 AM unless otherwise provided. Button 346 is operable for setting the clock and for setting an alarm function.

In one embodiment, a user can arm or disarm selected elements of a security system using module 200F. In one embodiment, the user can interact
10 with a caller at an entry door, via exterior module 200D. Upon reading and understanding this description, one of skill in the art will recognize that functions available using PDU 400 are also available using module 200F.

Figure 12 depicts a base station with LD comm module 250A in one embodiment of the present system. In one embodiment, base 250A is in
15 communication with communication network 300 via wireless link 210. Communication network 300 may include, but is not limited to, a cellular telephone network, a CELLEMETRY® network, a two-way pager network, a public switched telephone network or a radio frequency network. Communication network 300 enables long range communication.

Figure 13 depicts one embodiment of the present system. In one embodiment, module 200L is responsive to heat. In one embodiment, module 200L is responsive to smoke. In one embodiment, module 200L is battery powered, and in one embodiment, module 200L is powered by metered electric service. Module 200L is coupled via a wireless link to other wireless modules
25 within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 14 depicts one embodiment of the present system. In one embodiment, modules 200M are responsive to glass breakage of glass panes in window 500. In one embodiment, modules 200M are battery powered, and in
30 one embodiment, modules 200M are powered by metered electric service. Wireless links couple modules 200M to other wireless devices or modules

within the system. In one embodiment, the wireless links comprise BLUETOOTH® communication technology.

Figure 15 depicts one embodiment of the present system. In one embodiment, module 200N includes a video camera mounted to a wall. In one
5 embodiment, module 200N captures and transmits video images and may be battery powered or powered by metered electric service. Module 200N is coupled via wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

10 Figure 16 depicts one embodiment of the present system installed at entry door 510. In one embodiment, module 200Q includes a magnetic contact to detect the position of door 510 relative to door frame 505. Module 200Q is battery powered or powered by metered electric service. Module 200Q is coupled by wireless link to other wireless devices or modules within the system.
15 In one embodiment, the wireless link comprises BLUETOOTH® communication technology. Figure 16 also depicts module 200R including deadbolt lock with bolt receiver. In one embodiment, module 200R comprises a sensor to detect the position of the deadbolt lock. Signals generated by module 200R are communicated via wireless link to other wireless devices or modules
20 within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 17 depicts one embodiment of the present system. In Figure 17, module 200S includes a motion sensor mounted on a wall surface and detects motion of people and animals within the room. In one embodiment, module
25 200S may be battery powered or powered by metered electric service. In one embodiment, module 200S may include a passive infrared motion sensor. Module 200S is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

30 Figure 18 depicts one embodiment of the present system. In Figure 18, wall mounted duplex outlet 520 is coupled via wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises

BLUETOOTH® communication technology. In response to other wireless modules within the system, including PDU 400, module 200S alternatively powers or unpowers appliances and devices that are connected to outlet 520. In one embodiment, power for the operation of module 200S is derived from the
5 line current supplying outlet 520.

Figure 19 depicts one embodiment of the present system. In Figure 19, module 200U includes a siren, or other sounding device, for sounding an alarm. In one embodiment, module 200U may be battery powered or powered by metered electric service. Module 200U is coupled by wireless link to other
10 wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 20 depicts one embodiment of the present system. In Figure 20, module 200V includes a doorbell for signaling callers. In one embodiment, module 200V is battery powered or powered by metered electric service.
15 Module 200V communicates by wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 21 depicts one embodiment of the present system. In Figure 21, module 200X includes a monitor for receiving and transmitting audio. In one
20 embodiment, module 200X includes audio transducer 530 and control button 535. Activation of control button 535, in one embodiment, operates to send an emergency assistance request to PDU 400 or other module. Module 200X is operable as a room or baby monitor. In one embodiment, module 200X is operable as part of a bidirectional intercom system. In one embodiment, module
25 200X may be battery powered or powered by metered electric service. Module 200X is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 22 depicts one embodiment of the present system. In Figure 22,
30 module 200Y includes a monitor for receiving and transmitting audio and transmitting video sensed by optical sensor 540. In one embodiment, module 200Y includes audio transducer 530, control button 535, and optical sensor 540.

Module 200Y is operable as a room or baby monitor. In one embodiment, module 200Y is operable as a part of a bidirectional audiovisual intercom system. In one embodiment, module 200Y may be battery powered or powered by metered electric service. Module 200Y is coupled by a wireless link to other
5 wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 23 depicts one embodiment of the present system. In Figure 23, module 200Z includes a building environmental control device. In one embodiment, module 200Z includes a thermostat. In one embodiment, module
10 200Z includes a humidistat. In one embodiment, module 200Z includes programming to allow a user to enter, or select, a schedule for operating and controlling heating, ventilation or air conditioning ("H/VAC") equipment. Module 200Z includes visual display 545 and user operable control 550. In one embodiment, module 200Z may be battery powered, powered by metered electric
15 service, or powered by a system voltage used to operate the heating, ventilating, or air conditioning equipment. In one embodiment, the system voltage is a low voltage 24 VAC service. Module 200Z is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology. In operation, one
20 embodiment enables a user to control the operation of heating, ventilating, or air conditioning equipment from PDU 400. In addition, one embodiment provides that measured or sensed data is transmitted to PDU 400 for the benefit of a user. In addition, one embodiment having control 550, enables a user to program and determine the operation the H/VAC equipment. Other functions are also
25 contemplated, including programming of the H/VAC system operation, monitoring the H/VAC system integrity or troubleshooting operation of various system components.

Figure 24 depicts one embodiment of the present system. In Figure 24, module 200AA is an atmospheric condition monitoring device. In one
30 embodiment, module 200AA is a thermometer. In one embodiment, module 200AA is a barometric pressure monitor. In one embodiment, module 200AA includes a first display 555 and a second display 560 for monitoring outdoor and

indoor air temperature, respectively. Data generated by module 200AA may also be communicated to other devices, including, for example, PDU 400 for display to the user or to environmental or H/VAC system control equipment such as that depicted in Figure 23. In one embodiment, module 200AA may be battery
5 powered, system (or appliance) power or powered by metered electric service. Module 200AA is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH® communication technology.

Figure 25 depicts one embodiment of the present system. In Figure 25,
10 module 200AB is another embodiment of an atmospheric condition monitoring device. In one embodiment, module 200AB includes a temperature probe or other remote sensor. In one embodiment, module 200AB operates in conjunction with, and communicates with the module of Figure 24 or Figure 23. Data generated by module 200AB may also be communicated to other devices,
15 including, for example, PDU 400 for display to the user or to environmental or H/VAC system control equipment. In one embodiment, module 200AB may be battery powered, solar powered or powered by metered electric service. Module 200AB is coupled by a wireless link to other wireless modules within the system. In one embodiment, the wireless link comprises BLUETOOTH®
20 communication technology.

Figure 26 depicts an organizational diagram for one embodiment of a module system as herein described. Modular system 100 includes a security system 565 and an environmental controls and monitoring system 570. Security system 565 may also provide safety features.

25 In the embodiment shown, security system 565 includes detection system 575 and notification system 580. Other systems are also contemplated, including for example, configuration, programming and diagnostic or troubleshooting systems. Detection system 575 include components such as a motion detector (including a passive Infrared "PIR" sensor), a door or window contact or a video
30 camera. Notification system 580 includes components such as a wireless communication link, a PDU 400 device, a visual display, or an alarm clock-based control such as that depicted in Figure 11. Safety system components may

include an emergency call button module or a portable personal locator module driven by a global positioning satellite system (GPS) or other situational sensor.

In the embodiment shown, environmental controls and monitoring system 570 includes sensors and detectors 585, reporting 590 and actuators and transducers 595. Other systems are also contemplated, including for example, configuration, programming and diagnostic or troubleshooting systems. Sensors and detectors 585 include components such as a temperature probe, a position sensor (for determining an actuator position) or a fluid or gas detector. Reporting 590 includes components such as a wireless communication link, a PDU 400 device, a visual display, or an alarm clock-based control such as that depicted in Figure 11. Actuators and transducers 595 may include components such as a thermostat control, a sounding device such as a siren and others.

Figure 27 depicts one embodiment of the present system configured for building security and environmental control. In Figure 27, PDU 400 is wirelessly coupled to a plurality of sensor or control modules. PDU 400 is operable to wirelessly manage the system from a short range as well as a long range. In Figure 27, the system comprises perimeter modules 620A, 620B and 620C. In one embodiment, modules 620A, 620B and 620C may include a door contact, a video camera, a glass breakage detector, or other types of modules configured to detect a security breach occurring at the perimeter of a building or premises. Figure 27 also depicts a plurality of interior sensor modules, designated 625A, 625B and 625C. In one embodiment, modules 625A, 625B and 625C may include a motion detector, a video camera, a proximity detector, an intercom or monitor or other types of sensors configured to detect a security breach occurring in the interior of a building or premises. Figure 27 also depicts a plurality of building control or sensor modules, designated 630A and 630B. In one embodiment, modules 630A and 630B may include a thermostat, a humidistat, an electric window blind, an air conditioner control, a door lock control or other types of controls or sensors configured to manage a building or premises. Figure 27 also depicts a plurality of power control modules, designated 635A and 635B. In one embodiment, modules 635A and 635B may include power outlets coupled to such devices as a coffee maker, a television or

VCR, a floor lamp or other types of appliances or devices. Figure 27 also depicts a plurality of reporting sensor modules, designated 640A, 640B and 640C. In one embodiment, modules 640A, 640B and 640C may include a smoke detector, a freeze detector, a carbon monoxide detector, an interior/exterior
5 temperature detector, or other types of sensors configured to facilitate management of a building or premises. In one embodiment, a reporting sensor module may include a device configured to monitor salt levels in a water softener. Such a sensor can communicate wirelessly with PDU 400 to report the need for servicing of a water softener. In one embodiment, a reporting sensor
10 may include a device configured to monitor the status or operation of an air filter in a heating or ventilation system. Such a sensor can communicate wirelessly with PDU 400 to report the need for servicing of the filter. In one embodiment, a reporting sensor may include a module configured to monitor the condition of a rain gutter or eave trough. Such a module can communicate wirelessly with
15 PDU 400 to report the need for servicing of a rain gutter or eave trough. Other such modules are also contemplated by the present description.

Figure 28 depicts another embodiment of the present system. Figure 28 depicts a computer 700 coupled to keyboard or input device 705, and display monitor 710. Computer 700 includes a processor, memory and preferably
20 includes one or more disk drives. Computer 700 also includes a module having a wireless transceiver for communication with other modules or PDU 400 devices. In one embodiment, the wireless communication of data is conducted using BLUETOOTH® communication technology. Programming operable on computer 700 enables management of the sensors, devices, controls or modules
25 of the present system. In one embodiment, menu-driven programming enables a user to configure the system to report predetermined conditions to a local or remote PDU 400 or a remote monitoring facility. In one embodiment, the system reports to an e-mail address. In one embodiment, the system reports to an Internet address. In one embodiment, suitable programming enables a user to
30 configure the system to periodically report predetermined conditions needing servicing. For example, periodic cleaning of a gutter or eave trough can be

enunciated to a portable PDU 400 configured to wirelessly communicate with the present system.

Figure 29 depicts control program 720 and representative modules controllable using one embodiment of the present system. For example, module 5 725 may include an alarm clock module which can be wirelessly managed and controlled using program 720 operating on computer 700. As another example module 730 may include a furnace filter sensor that can be wirelessly monitored using program 720 operating on computer 700. Other modules are also depicted, enumerated 735, 740, 745 and 750, each of which may include any type of 10 module herein disclosed, including, for example, sensors for managing the operation of a water softener, monitoring and managing exterior building maintenance, operating and maintaining a coffee maker, operating a television or entertainment center or operating a furnace. In one embodiment, the wireless communication of data is conducted using BLUETOOTH® communication 15 technology.

In the embodiment of Figure 29, LD comm module 755 is shown coupled to control program 720. In operation, LD comm module can be configured by program 720 to communicate with a predetermined network selected from a plurality of networks. As another example, LD comm module can be configured 20 to communicate with a predetermined PDU 400 using a preselected schedule for communicating. In other words, one example provides that for weekdays, LD comm module 755 communicates using a two-way pager network and directs all communications to a PDU 400 carried by a first person, and on weekends, LD comm module 755 is configured to communicate with a second person using a 25 PDU 400 over a cellular telephone network. Other configurations and combinations are also contemplated. As another example, control program 720 may be configured to report H/VAC equipment status to a first PDU 400 and security system signals to a second PDU 400.

Figure 31 illustrates a block diagram of one embodiment of present 30 system 10000. System 10000, illustrated by the dashed box, includes processor 12000, power supply 12500, transceiver 13000, programming 15000 and position sensor 15500. Processor 12000 is coupled to, and executes,

programming 15000. Processor 12000 is also coupled to elements labeled power 12500 and transceiver 13000.

In the figure, GDO 1000 represents a garage door opener which may include system 1000 as previously described relative to Figure 32. It will be appreciated that, for purposes of this description, the garage door opener 1000 is not included in the system. However, other embodiments of the system are also contemplated, one of which includes the garage door opener as part of the system.

Processor 12000 may include a microprocessor as well as memory to perform the programmed functions and to retain settings and configuration information. Processor 12000 may also include a driver circuit to provide an electrical signal at a level sufficient to operate the garage door opener. Processor 12000 may also include a circuit to receive electrical signals from electrical, or electromechanical sensors and monitors and to provide an electrical signal to drive an actuator.

Power supply 12500 represents a power supply system that provides electrical energy for system 10000. As described in a subsequent section, power supply 12500 may include a battery power supply and a line powered supply.

Programming 15000 may include the instructions and data to enable the processor to perform the functions of the present system. Among the programming functions in one embodiment are instructions for causing processor 12000 to actuate a particular control upon receiving a predetermined signal. For example, if a garage door position sensor indicates that the door is in a raised position and an obstruction in the path of the garage door travel is detected by an optical sensor, then a signal received by the processor requesting the door to be closed is met with programming requesting that the obstruction be cleared before the door will travel. Processor 12000 and programming 15000 may include logic gates, circuitry or software to accomplish the selected functions.

Transceiver 13000 represents a wireless receiver and transmitter able to communicate using both a long range communication protocol and a short range communication protocol. For example, in one embodiment, the transceiver

module includes two separate transceivers, namely, a long range transceiver

13500 for long range communications, such as that used with cellular telephone communications and second transceiver for communicating over a short range.

A short range communication protocol, such as BLUETOOTH®, allows wireless

5 communications over distances commonly thought of as premises-based. It will be further appreciated that with suitable repeaters, gateways, switches or networks, the effective range of communication of transceiver 13000 may be extended to any distance.

In one embodiment, transceiver 13000 communicates, using a short range
10 protocol, with a second transceiver that communicates using a long range protocol. For example, transceiver 13000 may include a BLUETOOTH® transceiver and may communicate with a second transceiver. The second transceiver, in addition to having a BLUETOOTH® section, also interfaces with a long range communication network. For example, the second transceiver may
15 include a BLUETOOTH® transceiver and a connector that interfaces with a public switched telephone network (PSTN), a cellular telephone network, a pager network or other network having a long range communication protocol.

According to one definition, and subject to the vagaries of radio design and environmental factors, short range may refer to systems designed primarily
20 for use in and around a premises and thus, the range generally is below a mile. Short range communications may also be construed as point-to-point communications, examples of which include those compatible with protocols such as BLUETOOTH®, HomeRF™, and the IEEE 802.11 WAN standard (described subsequently). Long range, thus, may be construed as networked
25 communications with a range in excess of short range communications. Examples of long range communication may include, Aeris MicroBurst cellular communication system, and various networked pager, cellular telephone or, in some cases, radio frequency communication systems.

In various embodiments, a user may communicate with system 10000
30 using a telephone coupled to the public switched telephone network (PSTN), a cellular telephone, a pager (either one way or two way), a personal

communication device (such as a personal digital assistant, PDA), a computer, or other wired or wireless communication device.

Position sensor 15500 is coupled to processor 12000. In various embodiments, sensor 15500 may include one or more magnetic switches, contact switches, optical devices or cameras. For example, in one embodiment, sensor 15500 includes a first magnetic switch to detect door 4000 in an open position and second magnetic switch to detect door 4000 in a closed position. Sensor 15500 may be connected to processor 12000 by a wired connector or by a wireless link. Sensor 15500 provides an electrical signal corresponding to the position of door 4000. The input to sensor 15500 may be derived from door 4000, trolley 2500, or other member that provides reliable information relative to the position of door 4000.

An embodiment of transceiver 13000 is illustrated in Figure 32.

Transceiver 13000A is coupled to processor 13000 by link 132A. In the figure, transceiver 13000A is shown having compatibility with both a cellular telephone protocol 13500A and a BLUETOOTH® protocol 14000A. Other long range communication protocols may include, but are not limited to, cellular telephone protocols, one way or two-way pager protocols, and personal communication service (PCS) protocols. Examples include Time Division Multiple Access (TDMA), 3G, Aloha, Global System for Mobile Communications (GSM), Code-Division Multiple Access (CDMA), Short Message Service (SMS) and General Packet Radio Service (GPRS).

Personal Communications Service (PCS) describes a set of cellular technologies employing CDMA (also known as IS-95), GSM, or North American TDMA (also known as IS-136) air interfaces. PCS systems typically operate in the 1900 MHZ frequency range.

Time Division Multiple Access (TDMA) describes a digital wireless technology using time-division multiplexing (TDM) in which a radio frequency is time divided and slots are allocated to multiple calls. TDMA is used by the GSM digital cellular system.

A third specification, known as 3G, promulgated by the ITU (International Telecommunication Union, headquarters in Geneva, Switzerland)

represents a third generation of mobile communications technology with analog and digital PCS representing first and second generations. 3G is operative over wireless air interfaces such as GSM, TDMA, and CDMA. The new EDGE (Enhanced Data rates for Global Evolution) air interface has been developed
5 specifically to meet the bandwidth needs of 3G.

Another protocol, known as Aloha, enables satellite and terrestrial radio transmissions.

Global System for Mobile Communications, GSM, is another digital cellular system and uses TDMA, thus allowing eight simultaneous calls on the
10 same radio frequency.

Code-Division Multiple Access (CDMA) is a digital cellular technology that uses spread-spectrum techniques. CDMA does not assign a specific frequency to each user but rather every channel uses the full available spectrum and individual conversations are encoded with a pseudo-random digital
15 sequence.

Another transmission protocol, Short Message Service (SMS) allows communications of short messages with a cellular telephone, fax machine and an IP address. Messages are generally limited to a length of 160 alpha-numeric characters.

20 General Packet Radio Service (GPRS) is another standard used for wireless communications and operates at transmission speeds far greater than GSM. GPRS can be used for communicating either small bursts of data, such as e-mail and Web browsing, or large volumes of data.

The short range communication protocol may include, but is not limited
25 to, wireless protocols such as BLUETOOTH®, HomeRF™, wireless LAN (WLAN) or other personal wireless networking technology.

BLUETOOTH® is a trademark registered by Telefonaktiebolaget LM Ericsson of Stockholm, Sweden and refers to short range communication technology developed by an industry consortium known as the BLUETOOTH®
30 Special Interest Group. BLUETOOTH® operates at a frequency of approximately 2.45 GHZ, utilizes a frequency hopping (on a plurality of frequencies) spread spectrum scheme, and provides a digital data transfer rate of

approximately 1Mb/second. In one embodiment, the present system includes a transceiver in compliance with BLUETOOTH® technical specification version 1.0, herein incorporated by reference. In one embodiment, the present system includes a transceiver in compliance with standards established, or anticipated to be established, by the Institute of Electrical and Electronics Engineers, Inc., (IEEE). The IEEE 802.15 WPAN standard is anticipated to include the technology developed by the BLUETOOTH® Special Interest Group. WPAN refers to Wireless Personal Area Networks. The IEEE 802.15 WPAN standard is expected to define a standard for wireless communications within a personal operating space (POS) which encircles a person. In one embodiment, the transceiver is a wireless, bidirectional, transceiver suitable for short range, omnidirectional communication that allows ad hoc networking of multiple transceivers for purposes of extending the effective range of communication. Ad hoc networking refers to the ability of one transceiver to automatically detect and establish a digital communication link with another transceiver. The resulting network, known as a piconet, enables each transceiver to exchange digital data with the other transceiver. According to one embodiment, BLUETOOTH® involves a wireless transceiver transmitting a digital signal and periodically monitoring a radio frequency for an incoming digital message encoded in a network protocol. The transceiver communicates digital data in the network protocol upon receiving an incoming digital message.

In general, the effective communication range of BLUETOOTH® is relatively short, sometimes characterized with a maximum range of approximately 10 to 100 meters. The short range capabilities of BLUETOOTH® are suitable for premises-based applications, such as data exchange within a range roughly equal to the lineal boundaries of a typical property, or premises.

Communication range can be extended beyond this range by a number of different methods. For example, the range may be extended by coupling a BLUETOOTH® connection with a cellular telephone network, a narrow band personal communication systems ("PCS") network, a CELLEMETRY network, a narrow band trunk radio network or other type of wireless communication link.

Examples of PCS technology includes Code-Division Multiple Access (CDMA by Qualcomm Inc.), ReFLEX (by Motorola), Time Division Multiple Access (TDMA), Global Systems for Mobile communications (GSM) or others.

A user with a cellular telephone, or other cellular device, is then able to
5 communicate with the BLUETOOTH® device as though the user was local. The long distance network may include communications using a control channel. One such example is CELLEMETRY®. CELLEMETRY® is a registered trademark of Cellemetry LLC of Atlanta, Georgia, USA, and enables digital communications over a cellular telephone control channel. Other examples of
10 communication technology are also contemplated, including MicroBurst™ technology (MicroBurst™ is a trademark of Aeris.net, Inc.) or short message service (SMS). In one embodiment, the long distance network may include a pager network. In one embodiment, the pager network is a two-way pager network enabling bidirectional communication between a BLUETOOTH®-
15 enabled sensor, or device, and a user controlled pager. In one embodiment, the long distance network includes a narrow band Personal Communication System network. In one embodiment, the long distance network may include a telephone network. The telephone network may include communicating using an intranet or the Internet. Coupling to such a network may be accomplished, for
20 example, using a variety of connections, including a leased line connection, such as a T-1, an ISDN, a DSL line, or other high speed broadband connection, or it may entail a dial-up connection using a modem. In one embodiment, the long distance network may include a radio frequency or satellite communication network. In addition, one or more of the aforementioned networks may be
25 combined to achieve desired results.

Another short range communication protocol, known as HomeRF™, currently defined by specification 2.1, provides support for broadband wireless digital communications at a frequency of approximately 2.45 GHZ. HomeRF™ specification 2.1 is herein incorporated by reference.

30 Other long range and short range communication protocols are also contemplated and the foregoing examples are not to be construed as limitations but merely as examples.

Transceiver 13000 may be compatible with more than two communication protocols. For example, transceiver 13000 may be compatible with three protocols, such as a cellular telephone communication protocol, a two-way pager communication protocol, and BLUETOOTH® protocol. In such a case, a particular garage door opener may be operable using a cellular telephone, a two-way pager, or a device compatible with BLUETOOTH®. Furthermore, it will be appreciated that each of the aforementioned devices, namely a cellular telephone, a two-way pager, and a device compatible with BLUETOOTH®, may be combined in a single portable housing.

Transceiver 13000 may include circuitry to allow communications on more than one protocol. For example, position information may be received on a pager protocol and a user may transmit a command to operate the door opener using a cellular telephone protocol.

Figure 33 illustrates an embodiment of transceiver 13000B that is compatible with a pager protocol 13500B and a BLUETOOTH® protocol 14000B. Transceiver 13000B is coupled to processor 13000 by link 132B. Pager protocol 13500B may include one way or two way pager protocols. Examples of one way pager protocols include Post Office Code Standardisation Advisory Group (POCSAG), Swedish Format (MBS), the Radio Data System (RDS, by Swedish Telecommunications Administration) format and the European Radio Message System (ERMES, by European Telecommunications Standards Institute) format, Golay Format (by Motorola), NEC-D3 Format (by NEC America), Mark IV/V/VI Formats (Multitone Electronics), Hexadecimal Sequential Code (HSC), FLEX™ (Motorola) format, Advanced Paging Operations Code (APOC, by Philips Paging) and others. Examples of two way pager protocols include ReFLEX™ (Motorola) format, InFLEXion™ (Motorola) format, NexNet™ (Nexus Telecommunications Ltd. of Israel) format and others.

In one embodiment using a pager system, system 1000 provides a pager signal to indicate the position of the door or any other information relative to the garage or the door opener. Using a one way pager, the user may operate the door opener, or operate an actuator, using another communication channel, including for example, a cellular telephone or a personal communication device. Using a

two way pager, the user may operate the door opener, or operate an actuator, using the reply communication channel of the pager. The outbound signal (e.g., indicating the door position) may be transmitted to the pager on a predetermined schedule, or upon inquiry, or upon a change of position of the door (or actuator) at any time.

Figure 34 illustrates one embodiment of power supply 12500A. Battery power 12700 may include a dry cell, a gel cell, or other power supply. In addition, battery power 12700 may include rechargeable batteries. The recharging power may be supplied by line power 12800, solar power derived from sunlight, or other available means. Line power 12800 may include 110 volt metered electric service, 220 volt metered electric service, or other convenient electrical service. In one embodiment, door opener 1000 includes a plug-in power cord which couples to a nearby electrical outlet. In such a case, the battery power 12700 is received from line power 12800.

In the event of a power outage, or other interruption of the metered electric service, door opener 1000 may not be operable. However, battery power 12700 has sufficient capacity to continue powering processor 12000, transceiver 13000, and position sensor 15500. Battery power 12700 allows the user to continue to wirelessly receive information regarding the position of the door regardless of the status of line power 12800. In one embodiment, transceiver 13000 provides a wireless signal to the user to indicate that line power 12800 has been restored.

Figure 35 illustrates a variety of sensors, actuators, and transducers coupled to processor 12000. Driver circuits and receiver circuits may be employed between the sensors, actuators, and transducers to provide a signal level compatible with that of the processor. In various embodiments, one or more of the following sensors, actuators, and transducers may be included in system 10000. In one embodiment, system 10000 includes apparatus to provide a camera view of the door. The camera view may be derived from a video camera or still camera as part of system 10000 and the view may represent full motion video or still photos of the door or other operated equipment.

Auxiliary sensor 16000 may be coupled to processor 12000. Sensor 16500 represents an example of an auxiliary sensor coupled to a service door or other entry. The service door may provide access to the interior of the garage or it may provide access to other areas associated with the garage. For example, 5 sensor 16500 may monitor the position of a gate at the driveway to the garage. Optical sensor 17000 may include any sensor relying on optical information to generate an electrical signal. For example, sensor 17000 may include a light source and photocell to detect hazards associated with operation of door 4000 or sensor 17000 may provide a signal to indicate if an interior or exterior garage 10 light is illuminated. Sensor 17000 may also provide a signal to indicate if it is daytime or nighttime. Temperature sensor 17500 may include a thermal element to indicate a temperature present inside the garage or external to the garage. For example, sensor 17500 may indicate a freezing hazard or an overheating condition within the garage. Temperature sensor 17500 may also be coupled to 15 door opener 1000 to indicate a dangerous overheating condition of opener 1000.

Door opener 1000 may be coupled to processor 12000. Door opener 1000 may include a system as described above relative to Figure 32.

Auxiliary sensor 18500 may be coupled to processor 12000 and may include electrical or mechanical actuators or controls other than opener 1000. 20 For example, sensor 19000 indicates a courtesy light controller. Using the remote control of the present system, a user can control an interior or exterior courtesy light. Controlling the light may include adjusting the brightness or turning it on, off or flashing the light. As another example, HVAC actuator 20000 represents any or all elements of a heating, ventilation and air 25 conditioning system. In particular, HVAC actuator 20000 may include a coupling to a mechanical actuator, thermostat, ventilation system or other control. Using the remote control of the present system, a user can control heating, ventilation, or air conditioning system. Sensor 17500 may operate in conjunction with HVAC actuator 20000. Service door operator 19500 indicates 30 a power door actuator coupled to a service door, or other entry, providing access to the interior of the garage or other space.

Audio transducer 21000 may be coupled to processor 12000 and may include a microphone, speaker, or other audio transducer. The microphone is mounted in a position to receive local audio from a caller located outside of the garage. In one embodiment, audio transducer 21000 includes a microphone
5 mounted on the external surface of the structure (or garage) having door opener 1000. Alternatively, the transducer is mounted in the interior of the garage and an orifice is provided in the garage wall to pick up sounds external to the garage. Transducer 21000, in conjunction with processor 12000, provides a voice recognition system that enables voice control of operation of door opener 1000,
10 or other actuators.

Figure 36 graphically presents a block diagram of the functions performed by the programming executing on processor 12000. Programming 15000 includes, in various embodiments, web server programming 24000, auxiliary sensors programming 26000, door opener programming 21500,
15 auxiliary actuator programming 28500 and voice recognition programming 31000. Programming may include circuitry, logical gates, software, or other elements.

Web server programming 24000 provides an interface to allow remote control of system 10000. For example, and not by way of limitation, server
20 programming 24000 may include a wireless application protocol (WAP) server that couples to a telephone (or other communication) network to allow a user to operate, program and monitor system 10000. In one embodiment, a WAP server generates data that can be accessed using an Internet browser. In such a case, for example, the user can remotely configure system 10000 to turn off heater (part of
25 HVAC system 20000) anytime door 4000 is open and the exterior temperature (as determined by temperature sensor 17500) is below 50 degrees Fahrenheit. As another example, the user can remotely configure system 10000 to block operation of door opener 1000 in response to voice commands (received by audio transducer 21000) from a selected person. Data for the user-selected
30 programming may be stored in memory coupled to processor 12000. These and other programming configurations are contemplated.

Auxiliary sensors programming 26000 may include position sensor programming 26500, temperature sensor programming 27500, and optical sensor programming 27000. Position sensor programming 26500 may include software routines and modules that receive and interpret position information derived from door position sensor 16500. Optical sensor programming 27000 may include software routines and modules that receive and interpret information from optical sensor 17000. Temperature sensor programming may include software routines and modules that receive and interpret information from temperature sensor 17500. Other sensors, and appropriate programming, are also contemplated.

Door programming may include position sensor programming 22000 and actuator programming 22500. Position sensor programming 22000 may include software routines and modules that receive and interpret position information derived from a door position sensor as part of door opener 1000. Actuator programming may include door open programming 23000 and door close programming 23500. Door open programming 23000 may include software routines and modules that raise door 4000 in response to commands received by processor 12000. Door close programming 23500 may include software routines and modules that lowers door 4000 in response to commands received by processor 12000. Both door open programming 23000 and door close programming 23500 may also include programming that executes instructions in accordance with user specified, or predetermined, configurations. Door close programming 23500 may also check for obstructions in operating the door before instructing door opener 1000 to move to a closed position.

Auxiliary actuator programming may include, for example, courtesy light control programming 29000, HVAC programming 30000 and service door control programming 29500. Courtesy light control programming 29000 may include software routines and modules that control the operation of an interior, or exterior, courtesy light associated with the garage and coupled to processor 12000 by courtesy light controller 19000. HVAC programming 30000 may include software routines and modules that control the operation of HVAC system 20000 coupled to processor 12000. Service door control programming

29500 may include software routines and modules that control the operation of service door operator 19500 coupled to processor 12000.

Programming also may include voice recognition programming 31000. Voice recognition programming 31000 may include software programming for recognizing and executing instructions commensurate with a voice recognition system. The voice recognition system allows a user to speak into audio transducer 21000 and gain control over the operation of system 10000. Programming 31000 may include a security function to authenticate a voice command received by audio transducer 21000 before executing any instructions to operate door opener 1000.

Other programming functions are also contemplated. For example, a predetermined default setting can be configured to control the operation of system 10000 in the absence of a user specified configuration. The user may specify a desired configuration by providing instructions through audio transducer 21000, transceiver 13000, or a remote link using web server programming 24000.

Programming 15000 may also include software routines or modules to address prioritization matters. With multiple devices configured to independently control the operation of a single door opener, a problem may arise if conflicting commands are simultaneously received by the system. For example, a conflict arises if a first user transmits a long range communication to open the garage door and at the same time (or shortly thereafter) a second user transmits a short range communication to close the same door. A conflict may also arise if a first user attempts to operate a door using a wired button while a second user attempts to operate the same door using a transmitter compatible with a short range protocol of the present system 10000. In such cases, programming 15000 executing on processor 12000 will execute a routine to determine priority of each received command and suppress lower priority commands. For example, in one embodiment, the long range protocol may be configured to be inferior to that of short range protocol and, in turn, the short range protocol may be inferior to directly wired switch coupled to opener 1000. Other priority configurations may also be established. For example,

prioritization may be determined on the basis of proximity to opener 1000, on the basis of identity of a transmitter, on the basis of signal strength received by transceiver 13000, on the basis of recency of last communication, or on any other basis. In one embodiment, the user is empowered to establish a desired
5 configuration. A default configuration may also be provided which is operable in the event that a user-defined configuration is not operable.

Programming 15000 may include instructions to cause processor 12000 to transmit position information, or any other information, using all modes of communication. In one embodiment, the user is afforded an opportunity to
10 specify the distribution of position information. For example, the user may specify that position information is to be transmitted using only a long range communication protocol during specified hours and to a particularly specified user or group of users.

Programming 15000 may also enable processor 12000 to communicate
15 with a building security system or control system. For example, in the event of a particular detected security event, door opener 1000 may be instructed to either close or open.

Figure 37 includes a flow chart describing method 35000 involving one embodiment of the present system. Method 35000 describes operation of system
20 10000 for receiving door position information and for controlling the door from a remote location.

The method starts at item 35500 and assumes that the user has a wireless device capable of communicating with transceiver 13000. At 36000, the user and system 10000 establish a link on a communication channel. At 36500, door
25 position information is received by the user. In one embodiment, sensor 15500 provides the position information to processor 12000. At 37000, the user receives notification of the door position information. The door position may be indicated by a pair of lights on a pager (one light labeled "open" and another "close"), by a graphical image on a screen, a recognizable audio tone, a
30 recognizable vibration, or any other means of indicating position to a user. At 37500, the user is presented with one or more options to control system 10000. In the case that door 4000 is open, options may include partially, or fully, closing

the door. A single option may be presented that allows the user to toggle the position of the door between a closed and an open position. The option may be a button or several buttons. At 38000, the user indicates a selection using the portable wireless device. At 38500, the wireless device encodes a message for transmission to system 10000 including instructions to operate the door according to the user selection. At 39000, the message is transmitted to system 10000. The message may be routed to system 10000 on wired or wireless communication networks. The method ends at 39500.

Other Embodiments

10 In one embodiment, system 10000 is coupled to multiple door openers 1000. For example, many homes include two or more garages, each having an individual door opener. Also, commercial applications often include multiple overhead doors, each having an individual door opener. In such cases, multiple door openers 1000 may be coupled to a single system 10000 which controls and reports the operation of each door opener.

15 In one embodiment, programming 15000 allows a user having a cellular telephone in communication with system 10000 to control and monitor each of several door openers 1000, or other systems coupled to processor 12000. In one embodiment, programming 15000 allows a user to control and monitor a single door opener 1000, or other system coupled to processor 12000. Identification and group membership routines implemented by processor 12000 and programming 15000 allow for a superior user to configure the authority of multiple inferior users over multiple door openers 1000, each coupled to processor 12000, using system 10000.

25 The present system has been described, in part, relative to the operation of a garage door opener. However, it will be noted that other doors may be controlled and operated using a suitable power opener. The actuator for many garage door openers is electrically operated, however, it is understood that an actuator operable with the present system may include a pneumatically or hydraulically operated actuator. Furthermore, it will be appreciated that, in addition to operating a door, the present system and method may be adapted for use with other controls, such as a window control, Venetian blind control,

skylight control, or other operable device or actuator. By way of example, the present system and method may be adapted to operate with a pet access door, a house entry door, an interior swing door, a patio sliding door, a pocket door, an apartment entry door, a sliding window, or an elevator or lift access door. For instance, the present system may be adapted for use with a handicap access door.

In one embodiment, system 10000 includes circuitry and programming to detect proximity of a compatible transceiver. For example, system 10000 may include a BLUETOOTH® compatible transceiver which implements a self-aware feature to determine the presence of a compatible device within effective range. Thus, if system 10000 detects that a compatible device is within range, then a preprogrammed function is executed. Security systems or authorization systems are included in system 10000 to ensure that any detected compatible device is authorized to exercise control over system 10000. For instance, and in one embodiment, if a BLUETOOTH® equipped wireless garage door opener is brought within a predetermined range, then system 10000 automatically operates an electric garage door opener. In particular, if the door is closed at a time when the door opener is brought within range, then system 10000 operates to open the door and if the door is open at a time when the door opener is brought within range, then system 10000 operates to close the door. As another example, one embodiment of the present system 10000 includes a BLUETOOTH® equipped wireless pet collar and a BLUETOOTH® equipped pet door opener. The pet door is thus automatically opened when a dog wearing the collar approaches the door. As yet another example, one embodiment of the present system 10000 includes a BLUETOOTH® equipped module and a BLUETOOTH® equipped handicapped-person accessible door opener. The handicapped-person accessible door is thus automatically opened when a person carrying the module approaches the door. The module may be affixed to a wheelchair or other device.

Conclusion

Other embodiments are possible and the examples provided herein are intended to be demonstrative and not exclusive or exhaustive of the present invention, which is determined by the scope of the appended claims and the full range of equivalents to which they are entitled.

WHAT IS CLAIMED IS:

1. A device comprising:
a security sensor for detecting a condition; and
5 a wireless transceiver electrically coupled to the sensor, the wireless transceiver for communicating with the security sensor, the wireless transceiver adapted for monitoring a radio frequency for an incoming digital message in a network protocol and adapted for retransmission of digital messages in the network protocol.
10
2. The device of claim 1 wherein the wireless transceiver operates on a frequency of approximately 2.45GHz.
3. The device of claim 1 or 2 wherein the wireless transceiver is
15 substantially compatible with standards under IEEE 802.15.
4. The device of any of claims 1 to 3 wherein the wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
- 20 5. The device of any of claims 1 to 4 wherein the security sensor comprises a motion sensor, a passive infrared (PIR) motion detector, a pressure sensor, a position sensor, a proximity sensor, a glass breakage sensor, or a video camera.
6. The device of any of claims 1 to 5 further comprising an environmental
25 sensor, the environmental sensor coupled to, and in communication with, the wireless transceiver.
7. The device of claim 6 wherein the environmental sensor comprises a
30 temperature sensor, a gas sensor, a particulate sensor, a fluid sensor, or a sound sensor.

8. The device of any of claims 1 to 7 further comprising a control coupled to, and in communication with, the wireless transceiver.
9. The device of claim 8 wherein the control comprises a power control, an appliance control, an air conditioner control, a furnace control, or a ventilation control.
10. The device of any of claims 1 to 9 further comprising an operable security device coupled to the wireless transceiver.
11. The device of claim 10 wherein the operable security device comprises a lock or a siren.
12. The device of any of claims 1 to 11 wherein the wireless transceiver relays communications between a plurality of other wireless transceivers.
13. The device of any of claims 1 to 12 wherein the wireless transceiver communicates with a long range, bidirectional wireless network.
14. The device of any of claims 1 to 13 wherein the wireless transceiver communicates with a telephone, a cellular telephone, a pager, a computer, a personal communication service (PCS) device, a narrowband PCS device, a two-way pager, or a personal data assistant.
15. The device of any of claims 1 to 14 wherein the sensor and the wireless transceiver are powered by battery or metered electric service.
16. A system comprising:
a security device;
a first wireless transceiver electrically coupled to the security device, the first wireless transceiver adapted for communicating with the security device, monitoring a plurality of radio frequencies, retransmitting digital data in a digital

network protocol, receiving outbound data from the security device and wirelessly transmitting the outbound data using the digital network protocol, and adapted for wirelessly receiving incoming digital data in the network protocol and communicating the incoming digital data to the security device; and

- 5 a second wireless transceiver in communication with the first wireless transceiver, the second wireless transceiver adapted for monitoring the plurality of radio frequencies, receiving and retransmitting digital data in the digital network protocol, communicating outgoing data to a user, and transmitting the incoming digital data.

10

17. The system of claim 16 wherein the first wireless transceiver is a spread spectrum transceiver.

15

18. The system of claim 16 or 17 wherein the first wireless transceiver is substantially compatible with standards under IEEE 802.15.

20

19. The system of any of claims 16 to 18 wherein the first wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.

20. The system of any of claims 16 to 19 wherein the second wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.

25

21. The system of any of claims 16 to 20 wherein the second wireless transceiver is electrically coupled to a user controllable communication device.

22. The system of claim 21 wherein the user controllable communication device is in communication with a user.

30

23. The system of any of claims 16 to 22 wherein the second wireless transceiver is coupled to a telephone line, a long range transceiver, a cellular

communication network, a narrowband personal communication system network, a modem, a packetized communication network, or the Internet.

24. The system of any of claims 16 to 23 wherein the security device and the
5 first wireless transceiver are battery powered or line voltage powered.

25. A system comprising:
a first module including:

10 a microprocessor controller;
a lock coupled to the controller;
an audio transducer coupled to the controller, the audio transducer
for generating an electrical signal in response to received audio and for
generating audio in response to a received electrical signal;
a caller accessible identification module coupled to the controller,
15 the caller accessible identification module for receiving caller entered
information;

a proximity detector coupled to the controller, the proximity
detector for signaling the presence of a caller near the exterior module; and
a first wireless transceiver coupled to the controller, the first
20 wireless transceiver transmitting a digital signal received from the controller, the
first wireless transceiver monitoring a radio frequency for an incoming digital
message in a network protocol and for communicating digital data in the network
protocol upon receiving an incoming digital message; and

a second module including:
25 a second wireless transceiver in wireless communication with the
first wireless transceiver, the second wireless transceiver monitoring a radio
frequency for an incoming digital message in a network protocol and for
communicating digital data in the network protocol upon receiving an incoming
digital message; and
30 a user accessible control panel electrically coupled to the second
wireless transceiver.

26. The system of claim 25 wherein the first wireless transceiver is substantially compatible with standards under IEEE 802.15.
27. The system of claim 25 or 26 wherein the first wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
28. The system of any of claims 25 to 27 wherein the second wireless transceiver is substantially compatible with standards under IEEE 802.15.
29. The system of any of claims 25 to 28 wherein the second wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
30. The system of any of claims 25 to 29 wherein the first module is battery operated.
31. The system of any of claims 25 to 30 wherein the audio transducer comprises a speaker and a microphone.
32. The system of any of claims 25 to 31 further comprising a third wireless transceiver in communication with the first wireless transceiver and the second wireless transceiver and the third wireless transceiver is further coupled to a long range communication network.
33. The system of any of claims 25 to 32 wherein the first module further comprises a video camera and the second module comprises a video display.
34. The system of any of claims 25 to 33 wherein the proximity detector comprises a doorbell button or a video camera.
35. The system of any of claims 25 to 34 wherein the user accessible identification module comprises a keypad, a biometrics sensor, or a card reader.

36. A device comprising:
a clock;
a wireless transceiver coupled to the clock, the wireless transceiver
5 operable for retransmitting a digital signal, the wireless transceiver monitoring a
radio frequency for an incoming digital message in a network protocol and for
communicating digital data in the network protocol upon receiving an incoming
digital message;
a first control accessible to the user and coupled to the transceiver,
10 wherein actuation of the first control effectuates one of a plurality of user
selectable outputs, the user selectable outputs each coupled wirelessly to the
device; and
a second control accessible to the user, wherein actuation of the second
control selects a time for activating the one of a plurality of user selectable
15 outputs.
37. The device of claim 36 wherein the plurality of user selectable outputs
effectuable by the first control comprises activating a security system,
controlling an environmental control, or controlling a premises control.
- 20 38. The device of claim 36 or 37 wherein the second control accessible to the
user enables the user to select an absolute time, a predetermined time or a default
time.
- 25 39. The device of any of claims 36 to 38 wherein the wireless transceiver
communicates using an omnidirectional communication channel, the wireless
transceiver having ad hoc networking capability.
40. The device of any of claims 36 to 39 wherein the wireless transceiver is
30 substantially compatible with standards under IEEE 802.15.

41. The device of any of claims 36 to 40 wherein the wireless transceiver is compatible with BLUETOOTH® technical specification version 1.0.
42. A method of communicating comprising:
5 receiving a request for service from a caller using an annunciator module;
transmitting the request as a digital message in a wireless, premises-based network protocol;
receiving the request at a remote location using a personal communication device; and
10 notifying a user of the device of the received request.
43. The method of claim 42 wherein wirelessly transmitting the request comprises transmitting the encoded request using communication technology substantially compatible with standards under IEEE 802.15.
15
44. The method of claim 42 or 43 wherein wirelessly transmitting the request comprises transmitting using BLUETOOTH® technical specification version 1.0.
- 20 45. The method of any of claims 42 to 44 further comprising:
acknowledging receipt of the signal; and
communicating between the module and the device.
46. The method of any of claims 42 to 45 wherein communicating between
25 the module and the device comprises communicating a video image between the module and the device.
47. The method of any of claims 42 to 46 further comprising:
sending an executable command from the device;
30 receiving the executable command at the module; and
executing the instruction.

48. The method of claim 47 wherein sending an executable command comprises sending an executable command to operate a door lock.
49. A method, comprising:
- 5 entering a predetermined code into a portable transmitter;
transmitting the code as a digital message in a wireless, premises-based network protocol;
receiving the code at a receiver coupled to an operable device;
verifying authorization of the transmitted code; and
10 operating the device.
50. The method of claim 49 wherein wirelessly transmitting the code as a digital message in a network protocol comprises transmitting using communication technology substantially compatible with standards under IEEE
15 802.15.
51. The method of claim 49 or 50 wherein transmitting the code as a digital message comprises transmitting using BLUETOOTH® technical specification version 1.0.
- 20 52. The method of any of claims 49 to 51 wherein operating the device comprises unlocking a door lock or operating an electric light.
53. A method of operating a security system, comprising:
- 25 detecting the position of a bolt;
transmitting information corresponding to the detected position using a wireless radio frequency link in a digital, premises-based network protocol;
receiving the transmitted information; and
operating a security system as a function of the received information.
- 30 54. The method of operating a security system of claim 53 wherein operating a security system as a function of the received information comprises operating

perimeter sensors when the bolt is detected in a first position and operating
perimeter sensors and interior sensors when the bolt is detected in a second
position.

5 55. The method of operating a security system of claim 53 or 54 further
 comprising detecting a video image using an interior camera and wherein
 operating a security system further comprises operating a security system as a
 function of the bolt position and the detected video image.

10 56. The method of operating a security system of any of claims 53 to 55
 wherein transmitting information corresponding to the detected position using a
 wireless radio frequency link in a digital network protocol comprises
 transmitting information corresponding to the detected position using
 communication technology substantially compatible with standards under IEEE
15 802.15.

 57. The method of operating a security system of any of claims 53 to 56
 wherein transmitting information corresponding to the detected position using a
 wireless radio frequency link in a digital network protocol comprises
20 transmitting information corresponding to the detected position using
 BLUETOOTH® technical specification version 1.0.

 58. A method of remotely operating a security system, comprising,
 executing programming on a portable communication device;
25 generating a visual display of options for controlling the security system;
 selecting operational parameters for the security system using the display;
 executing a command to implement the selected operational parameters;
 and
 transmitting the command and selected parameters to the security system
30 using a wireless radio frequency link in a digital, premises-based network
 protocol.

59. The method of claim 58 wherein transmitting the command and selected parameters comprises transmitting the command and selected parameters on a communication channel substantially compatible with standards under IEEE 802.15.

5

60. The method of claim 58 or 59 wherein transmitting the command and selected parameters comprises transmitting the command and selected parameters using BLUETOOTH® technical specification version 1.0.

10

61. A building management system comprising:
a transducer for generating data upon detecting a local event;
a first communication module coupled to the transducer, the first communication module including a first transceiver for wirelessly transmitting transducer data in a premises-based, digital network protocol; and
15 a second communication module for wirelessly communicating with the first communication module, the second communication module further including:

15

a second transceiver for communicating with the first communication module using the digital network protocol; and

20

a user operable device coupled to the second transceiver, the user operable device adapted for communicating with the transducer via the digital network protocol.

25

62. The building management system of claim 61 wherein the first communication module and the second communication module communicate using communication technology substantially compatible with standards under IEEE 802.15.

30

63. The building management system of claim 61 or 62 wherein the first communication module and the second communication module communicate using BLUETOOTH® technical specification version 1.0.

64. The building management system of any of claims 61 to 63 wherein the first communication module further comprises a controllable member, wherein the controllable member is operated as a function of the user operable device.

5 65. A method of communicating, comprising:
detecting a user controlled action;
generating encoded data as a function of the user controlled action;
transmitting the encoded data to a remote facility using a premises-based,
digital network protocol;
10 receiving the encoded data at the remote facility; and
initiating an emergency response as a function of the encoded data.

66. The method of claim 65 wherein transmitting the encoded data to a remote facility using a digital network protocol comprises transmitting the
15 encoded data to a remote facility using communication technology substantially compatible with standards under IEEE 802.15.

67. The method of claim 65 or 66 wherein transmitting the encoded data to a remote facility using a digital network protocol comprises transmitting the
20 encoded data to a remote facility using BLUETOOTH® technical specification version 1.0.

68. The method of any of claims 65 to 67 wherein initiating an emergency response comprises summoning fire suppression aid, summoning police service,
25 or summoning medical aid.

69. The method of any of claims 65 to 68 wherein detecting a user controlled action comprises detecting a keystroke, a touch screen input, or an audible
30 command.

70. The method of any of claims 65 to 69 wherein generating encoded data comprises generating encoded data indicative of a fire emergency, a police emergency or a medical emergency.
- 5 71. A system comprising:
a passive infrared motion detector; and
a transmitter coupled to the detector, the transmitter is compatible with
BLUETOOTH® technical specification version 1.0.
- 10 72. The system of claim 71 wherein the transmitter is substantially
compatible with standards under IEEE 802.15.
- 15 73. The system of claim 71 or 72 further comprising a receiver coupled to the
detector, the receiver is compatible with BLUETOOTH® technical specification
version 1.0.
- 20 74. The system of claim 73 wherein the receiver is substantially compatible
with standards under IEEE 802.15.
- 25 75. A system comprising:
a passive infrared motion detector; and
a transmitter coupled to the detector, the transmitter is compatible with
BLUETOOTH® technical specification version 1.0; and
a long range communication module, the module adapted for
communicating with the detector using the transmitter and further wherein the
module is coupled to a long range communication network.
- 30 76. The system of claim 75 further comprising a receiver coupled to the
detector, the receiver compatible with BLUETOOTH® technical specification
version 1.0 and wherein the module is adapted for communicating with the
detector using the receiver.

77. The system of claim 75 or 76 wherein the long range communication network is a telephone network, a cellular telephone network, a radio network, a personal communication system network, or a two-way pager network.

5 78. A device comprising:

a processor adapted for coupling to a door opener and having programming including instructions for generating a command to operate the door opener;

10 a first position sensor coupled to the processor and adapted for generating a first position signal based on a position of a first door coupled to the door opener;

a radio frequency transceiver coupled to the processor and adapted for transmitting the first position signal using a long range communication protocol and a short range communication protocol, and for receiving a wireless signal using the long range communication protocol and the short range communication protocol, the transceiver including circuitry for spread spectrum frequency hopping and wherein the command is based on the wireless signal.

20 79. The device of claim 78 wherein the transceiver is adapted for communicating on a protocol compatible with a cellular telephone communication protocol.

80. The device of claim 78 or 79 wherein the transceiver is adapted for communicating on a protocol compatible with a pager communication protocol.

25 81. The device of any of claims 78 to 80 wherein the transceiver operates at a frequency of approximately 2.45 GHZ.

30 82. The device of any of claims 78 to 81 wherein the transceiver is substantially compatible with standards under IEEE 802.15 or substantially compatible with BLUETOOTH® technical specification version 1.0.

83. The device of any of claims 78 to 82 wherein the first position sensor includes a magnetic switch, a contact switch, or a camera.

5 84. The device of any of claims 78 to 83 further comprising a battery coupled to the processor and coupled to the transceiver.

85. The device of any of claims 78 to 84 further comprising an optical sensor coupled to the processor and adapted for generating a light level signal based on light intensity in a region proximate to the first door, and further wherein the
10 transceiver is adapted for transmitting the light level signal.

86. The device of any of claims 78 to 85 further comprising a second position sensor coupled to the processor and adapted for generating a second position signal based on a position of a second door, and further wherein the
15 transceiver is adapted for transmitting the second position signal.

87. The device of any of claims 78 to 86 wherein the processor includes programming having instructions for generating a web page accessible from the Internet.
20

88. The device of any of claims 78 to 87 further comprising an audio transducer coupled to the processor and further wherein the processor includes programming having instructions for operating the door opener in response to a vocal command received by the transducer.
25

89. A method of manufacturing a module comprising:
adapting a processor to couple with a door opener;
adapting the processor to couple with a first position sensor;
coupling a wireless transceiver adapted for spread spectrum frequency
30 hopping to the processor;

adapting the transceiver to receive a first signal in a protocol compatible with a long range communication protocol and in a protocol compatible with a short range communication protocol;

5 adapting the transceiver to transmit information received from the first position sensor in a protocol compatible with a long range communication protocol and in a protocol compatible with a short range communication protocol; and

10 providing a program for executing on the processor, the program having instructions to cause the processor to operate the door opener based on the first signal.

90. The method of claim 89 wherein adapting the transceiver to receive a first signal in a protocol compatible with a long range communication protocol includes adapting the transceiver to receive the first signal in a protocol
15 compatible with a long range cellular telephone communication protocol.

91. The method of claim 89 or 90 wherein adapting the transceiver to receive a first signal in a protocol compatible with a long range communication protocol includes adapting the transceiver to receive the first signal in a protocol
20 compatible with a pager communication protocol.

92. The method of any of claims 89 to 91 further comprising providing a battery connector coupled to the processor and to the transceiver.

25 93. The method of any of claims 89 to 92 further comprising adapting the processor to couple with a second position sensor and wherein the transceiver is adapted for transmitting information received from the second position sensor.

30 94. The method of any of claims 89 to 93 further comprising adapting the processor to couple with an optical sensor and wherein the transceiver is adapted for transmitting a light level signal based on light intensity in a region proximate to a door coupled to the door opener.

95. The method of any of claims 89 to 94 further comprising adapting the processor to generate a command to open a door coupled to the door opener in response to an open signal received by the transceiver in a protocol compatible with the long range communication protocol.

5

96. The method of any of claims 89 to 95 further comprising adapting the processor to generate a command to open a door coupled to the door opener in response to an open signal received by the transceiver in a protocol compatible with the short range communication protocol.

10

97. The method of any of claims 89 to 96 further comprising adapting the processor to generate a command to close a door coupled to the door opener in response to a close signal received by the transceiver in a protocol compatible with the long range communication protocol.

15

98. The method of any of claims 89 to 97 further comprising adapting the processor to generate a command to close a door coupled to the door opener in response to a close signal received by the transceiver in a protocol compatible with the short range communication protocol.

20

99. The method of any of claims 89 to 98 further comprising adapting the processor to generate a web page accessible from the Internet.

25

100. The method of any of claims 89 to 99 further comprising adapting the processor to couple with an audio transducer and to operate the door opener in response to a vocal command received by the transducer.

30

101. A method of operating a door comprising:
establishing a wireless communication channel with a module coupled to the door;
transmitting a position signal on the channel based on a position of the door;

providing an indication to a user based on the position signal; and

receiving an instruction signal on the channel, the instruction signal

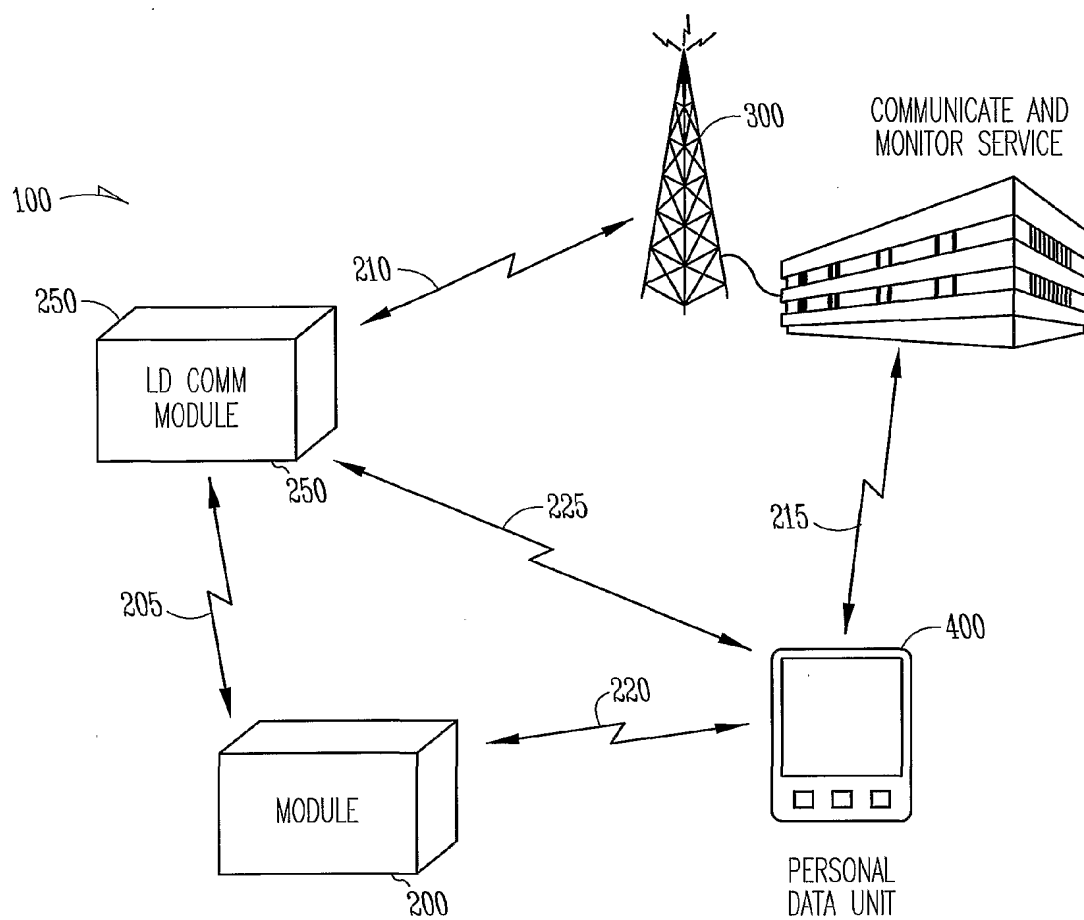
based on a user selected option for operating the door.

- 5 102. The method of claim 101 wherein establishing a wireless communication channel with a module coupled to the door includes communicating using a protocol compatible with a cellular telephone, a protocol compatible with a pager or a protocol compatible with BLUETOOTH® technical specification version 1.0.

10

103. The method of claim 101 or 102 wherein providing an indication to a user based on the position signal includes providing a visual indication.

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*Fig. 1*

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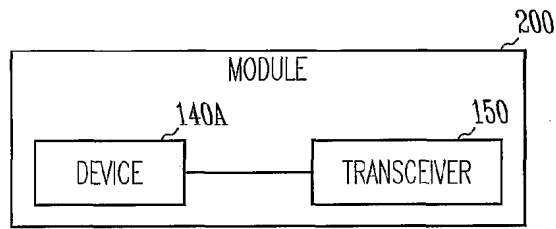


Fig. 2A

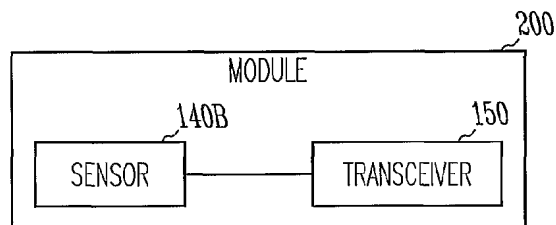


Fig. 2B

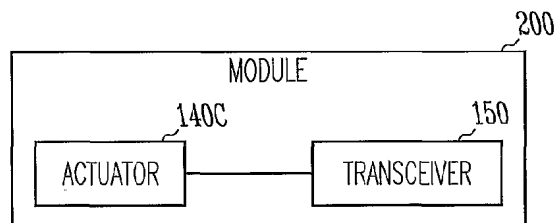


Fig. 2C

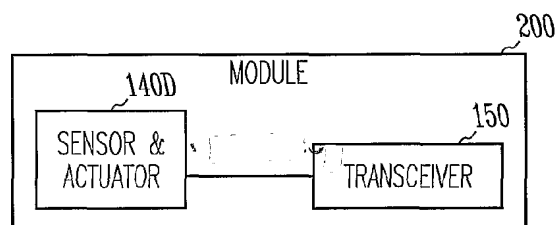
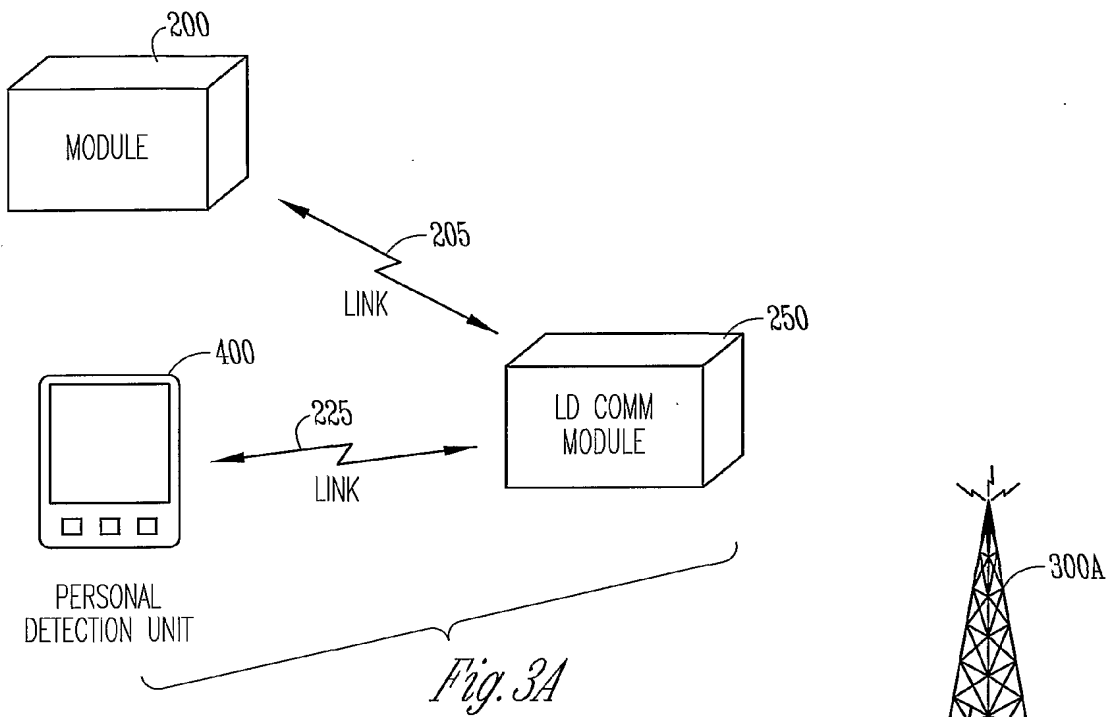
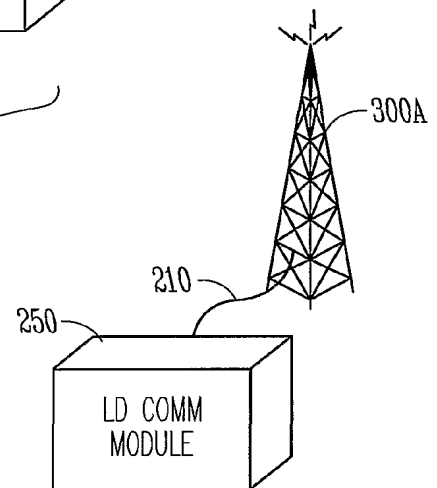
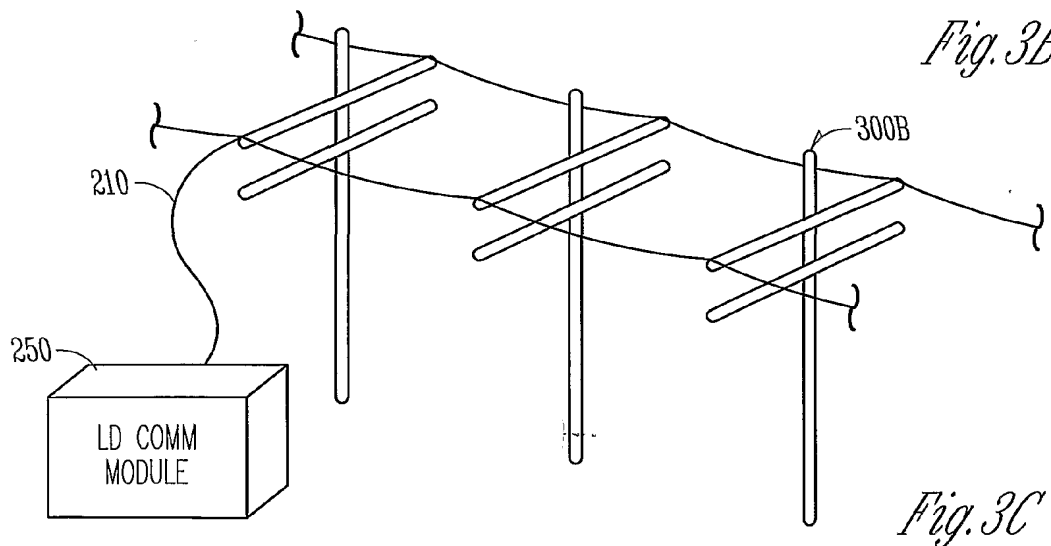


Fig. 2D

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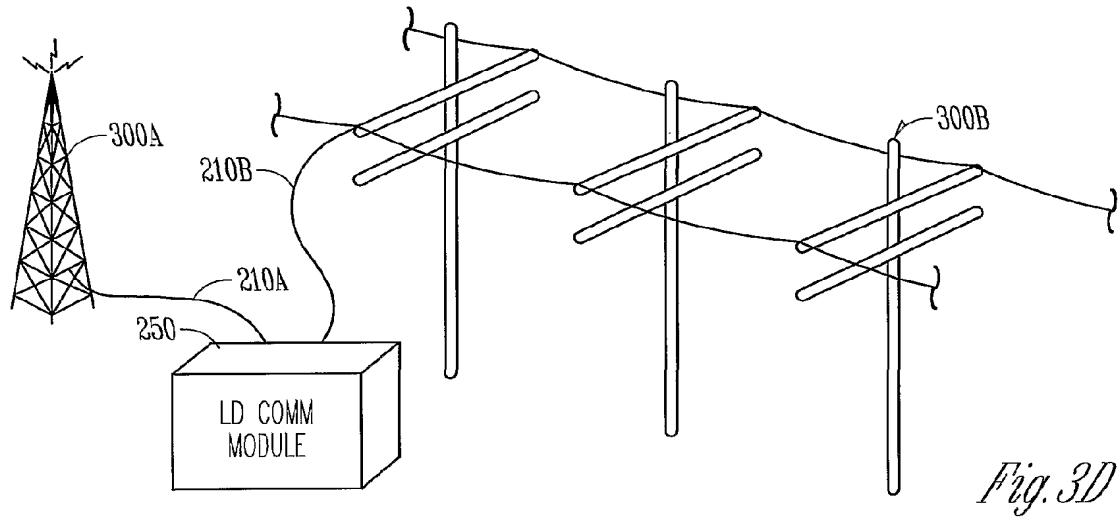
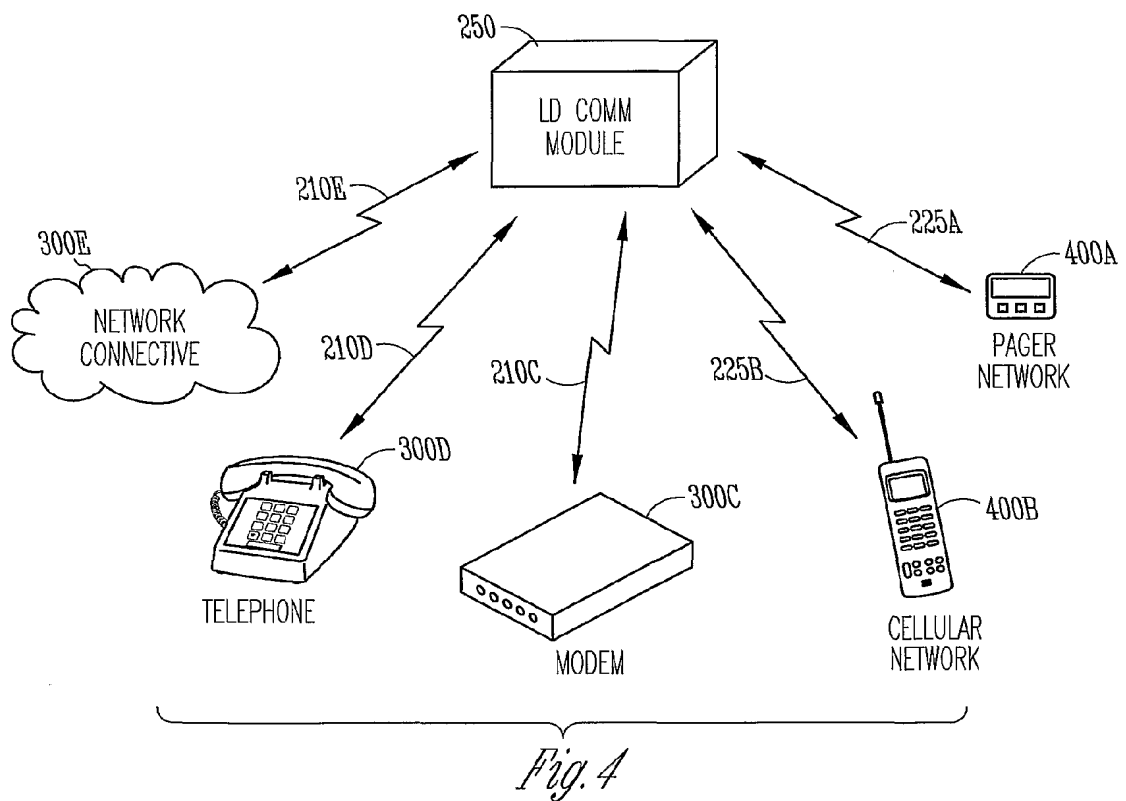
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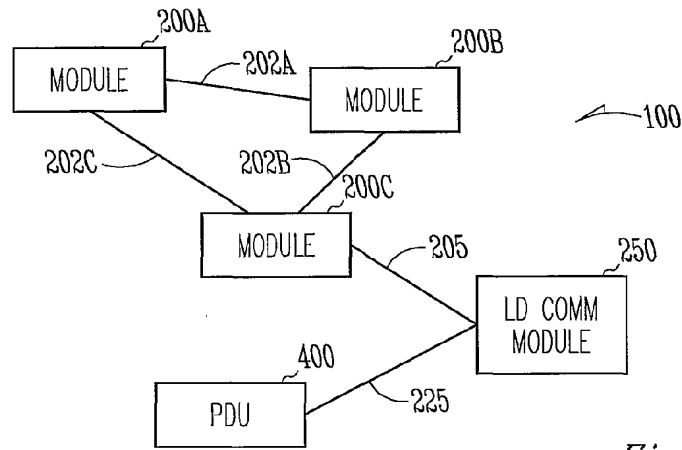


Fig. 5



Fig. 6A

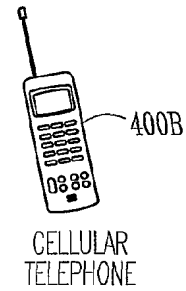


Fig. 6B

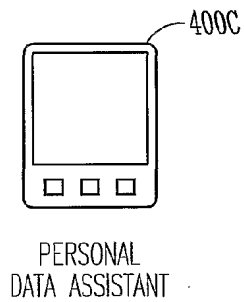


Fig. 6C

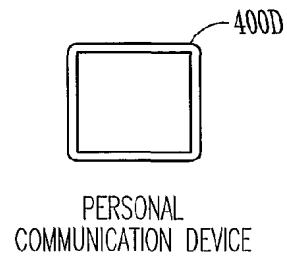
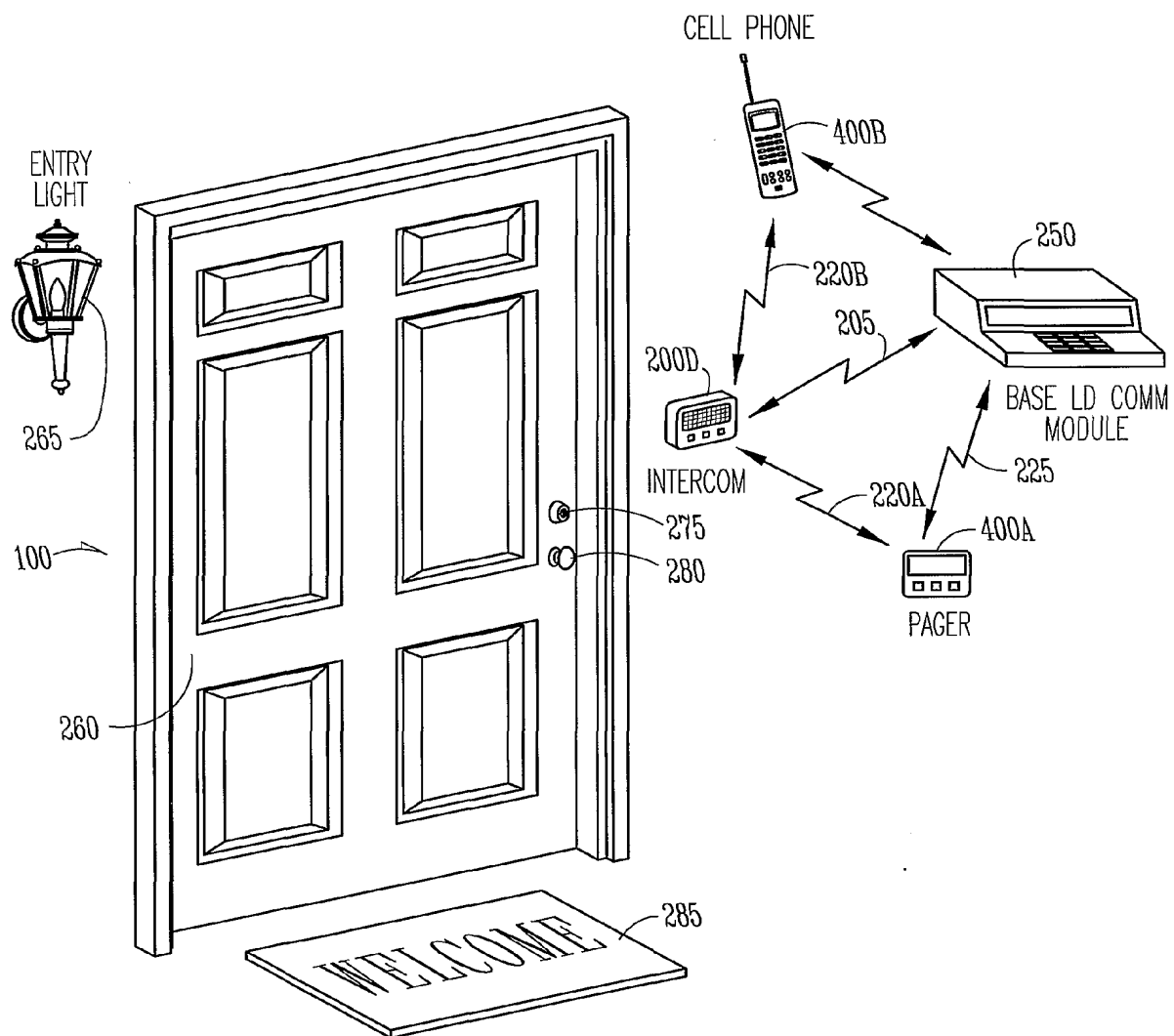


Fig. 6D

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*Fig. 7*

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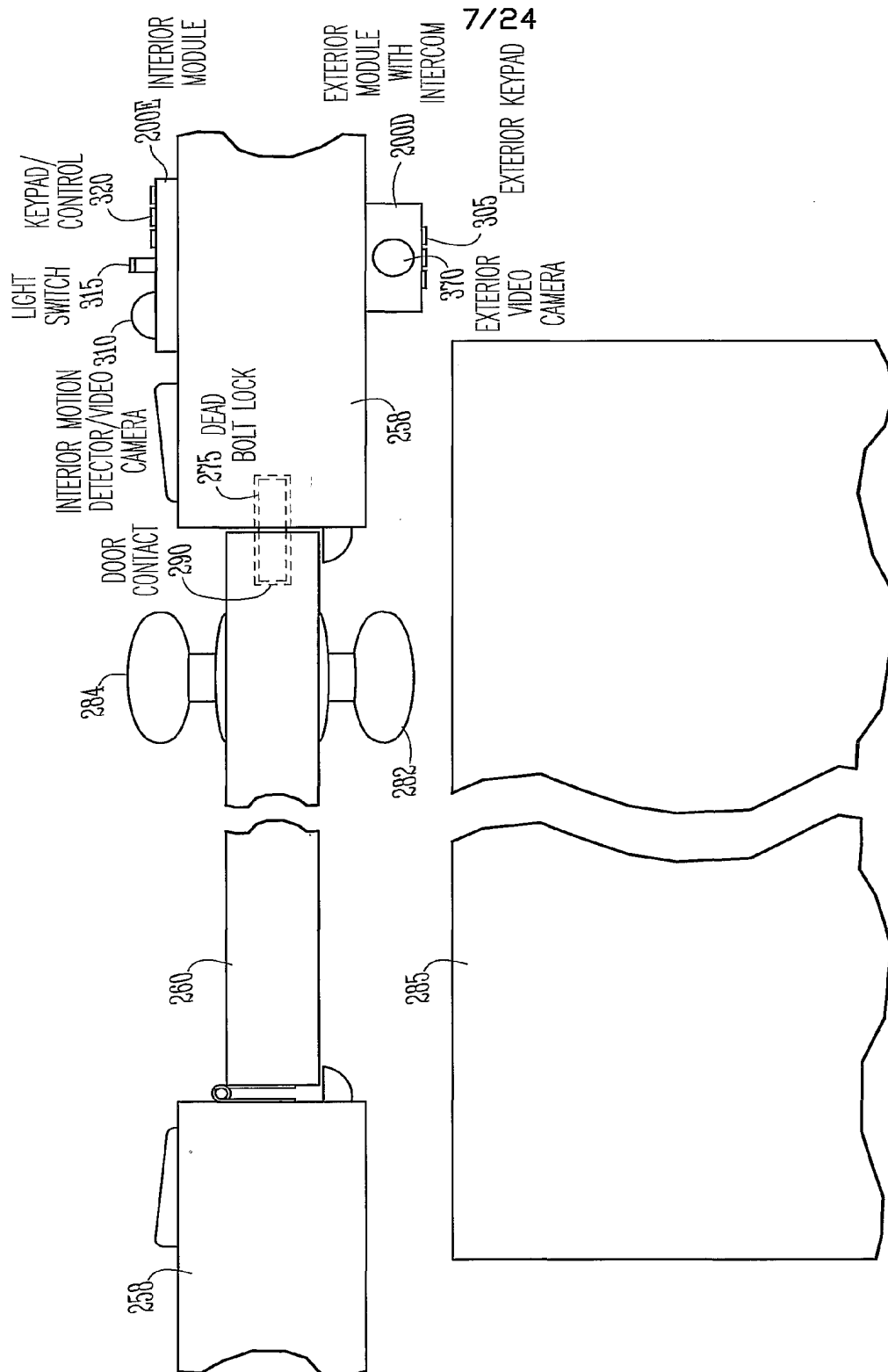


Fig. 8

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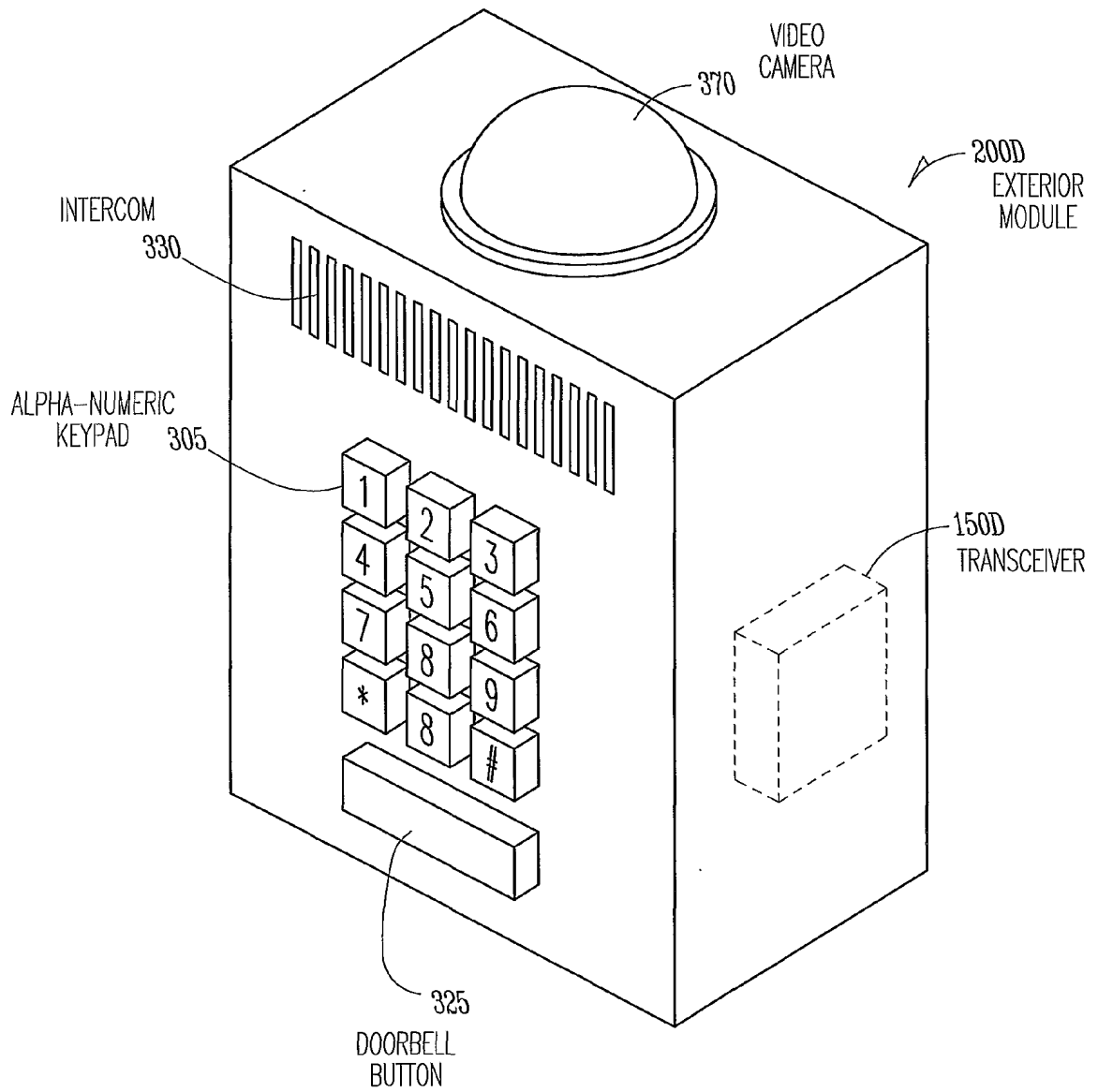
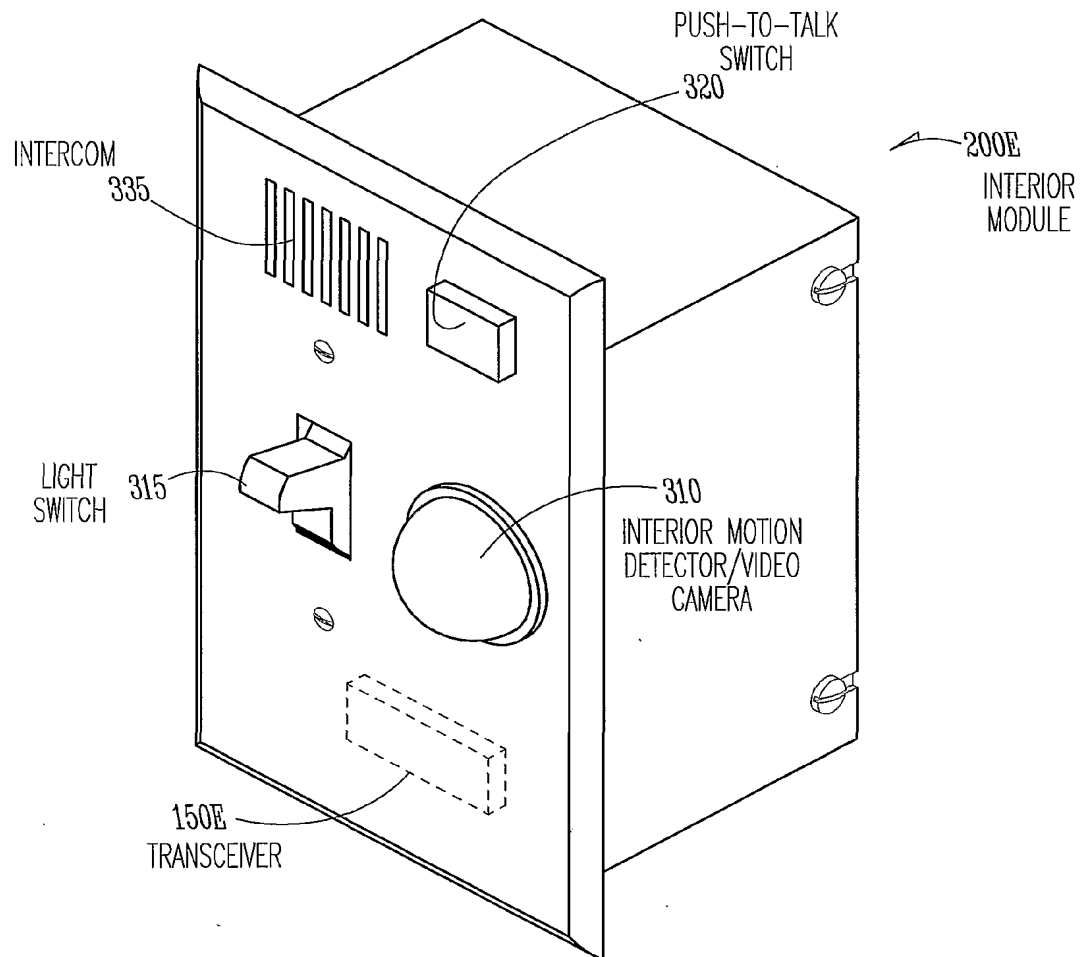


Fig. 9

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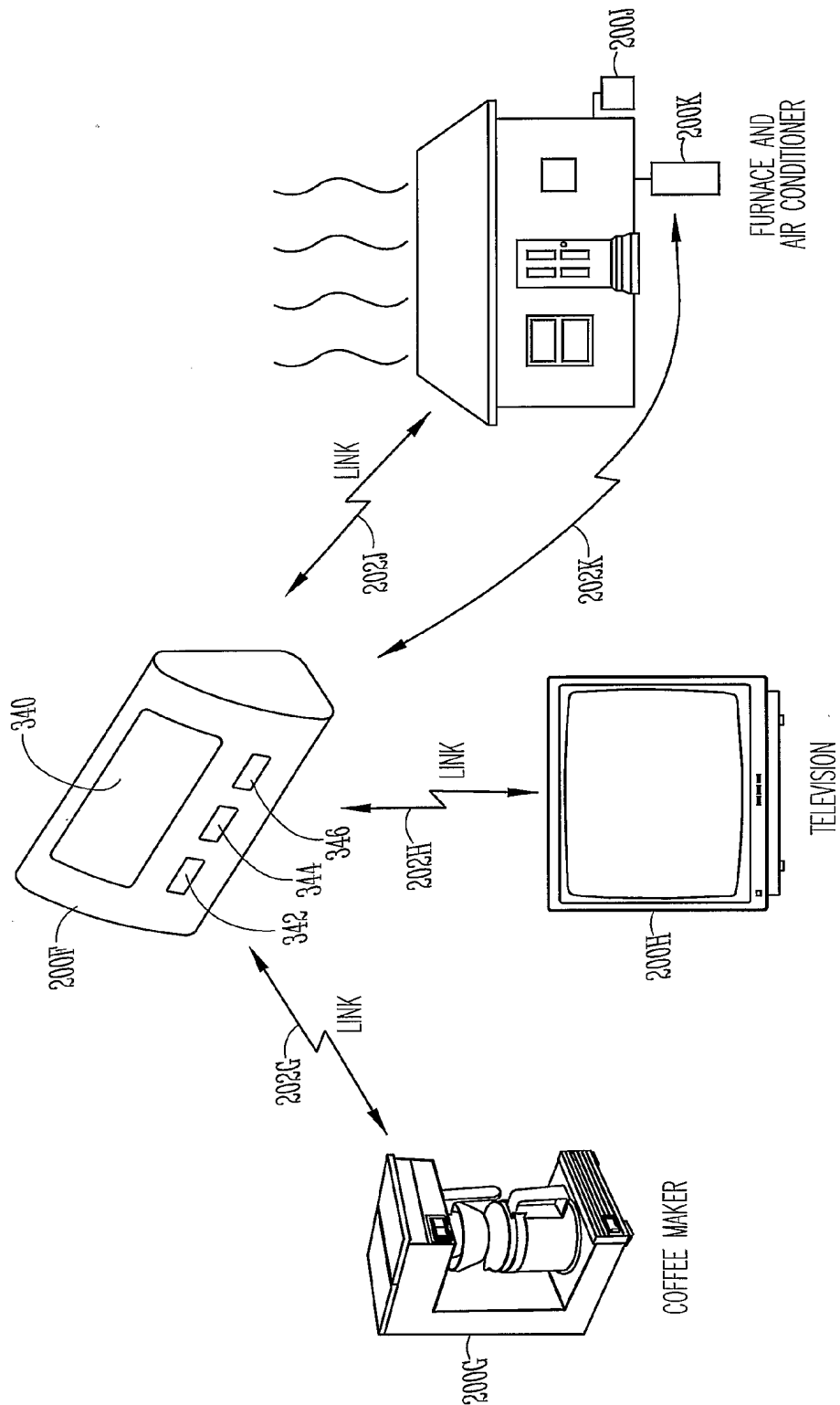
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*Fig. 10*

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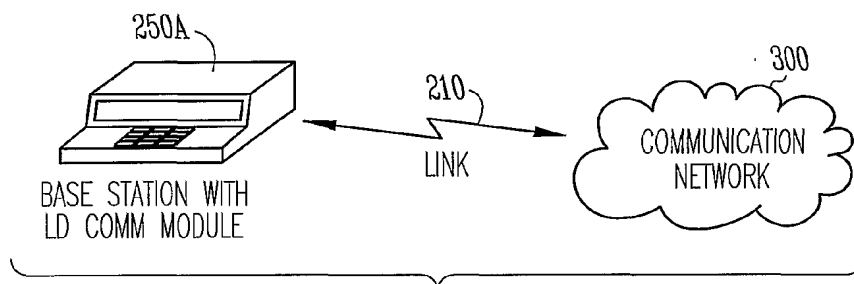


Fig. 12

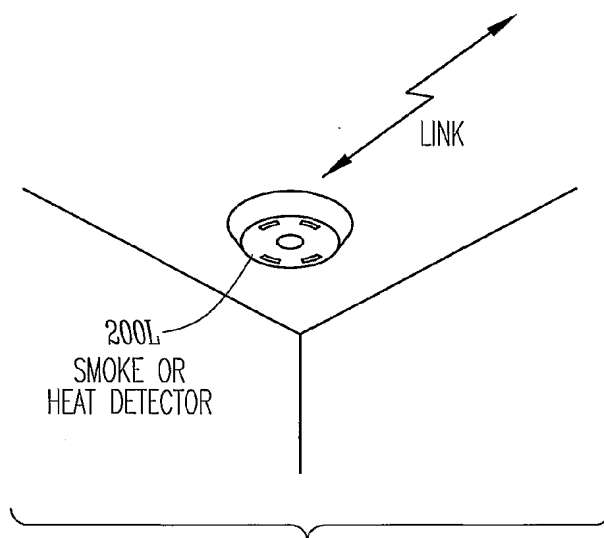


Fig. 13

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GLASS BREAKAGE DETECTION

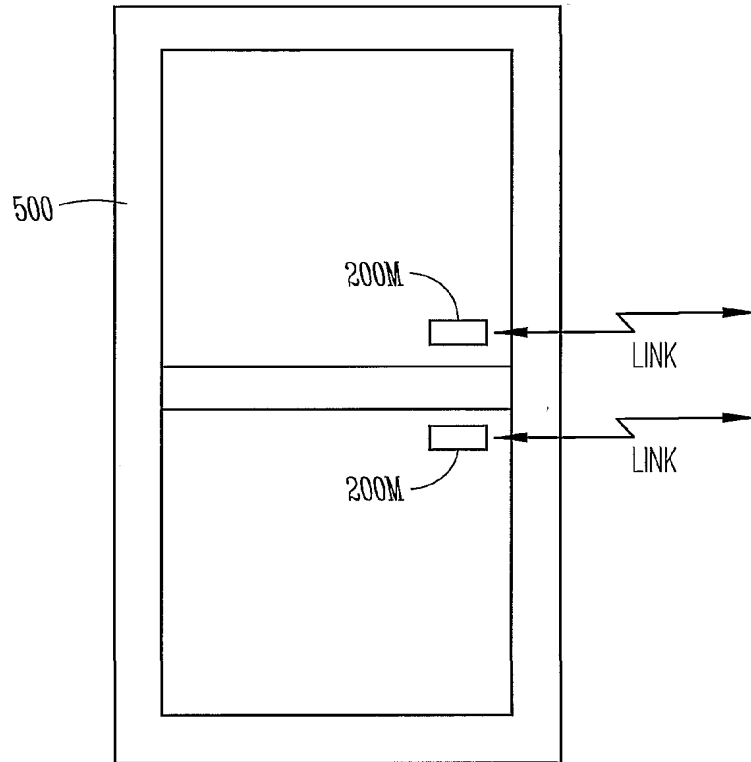


Fig. 14

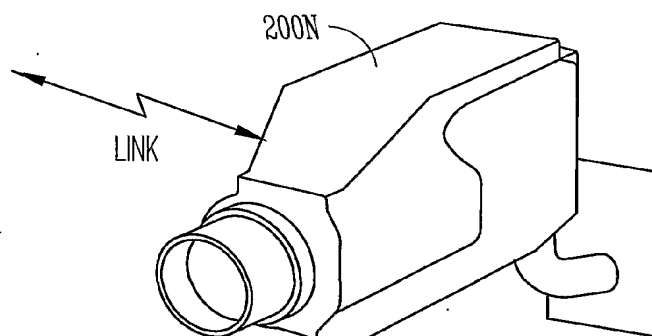


Fig. 15

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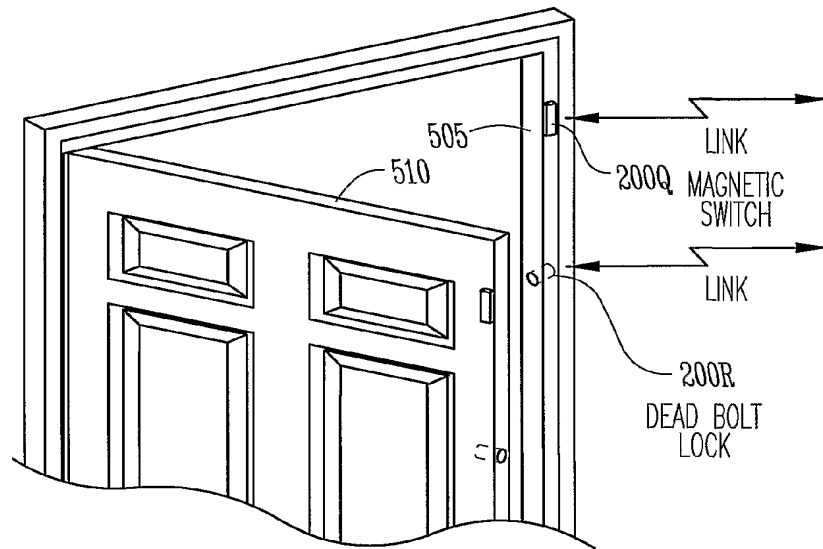


Fig. 16

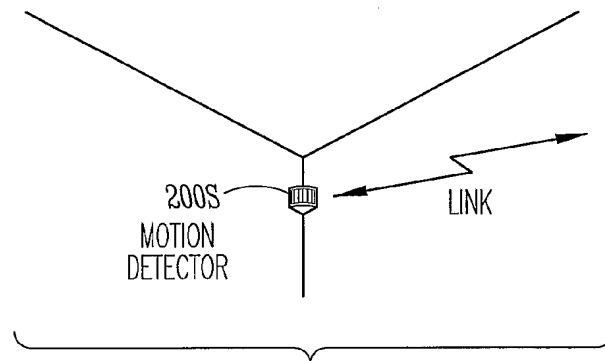


Fig. 17

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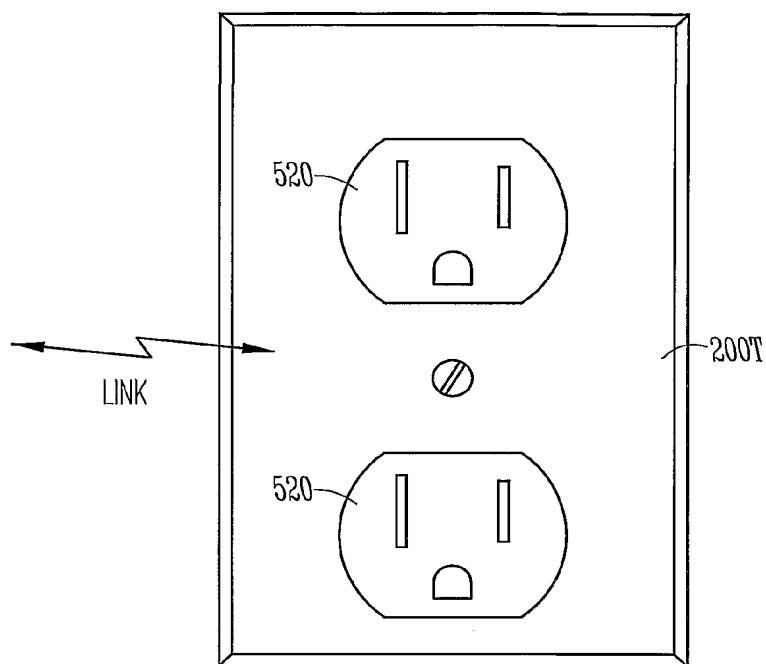


Fig. 18

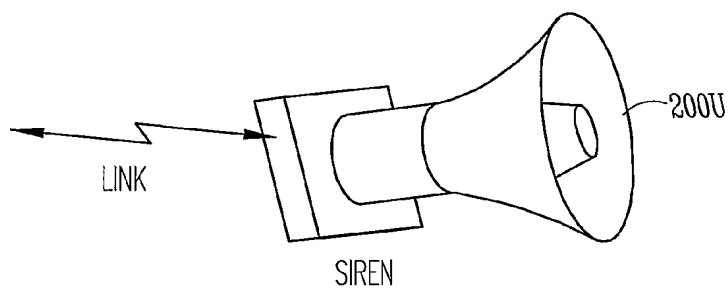


Fig. 19

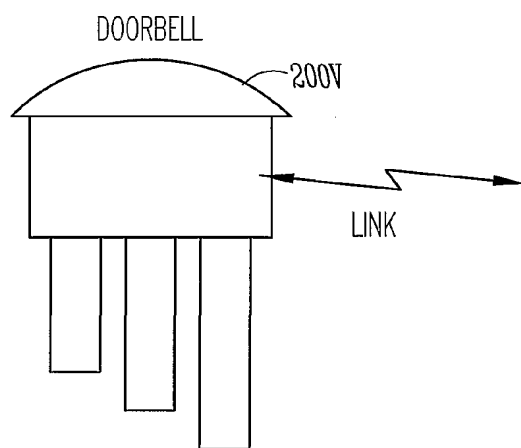


Fig. 20

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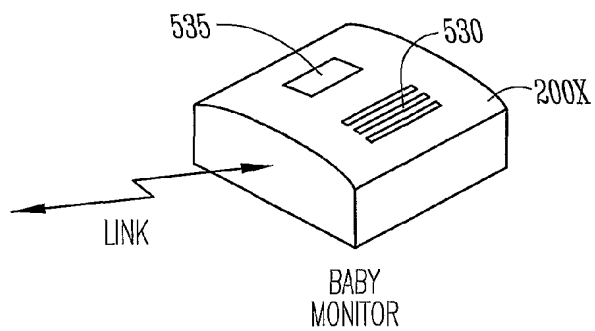


Fig. 21

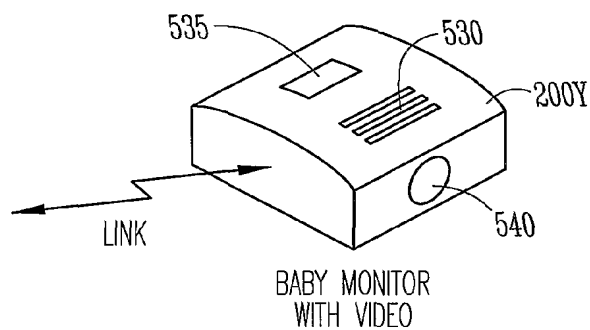


Fig. 22

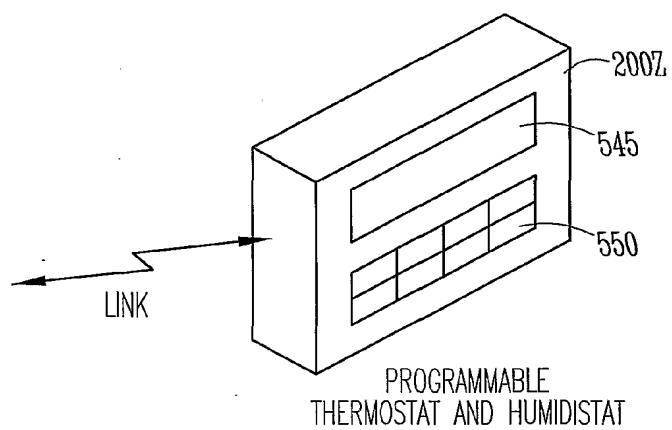


Fig. 23

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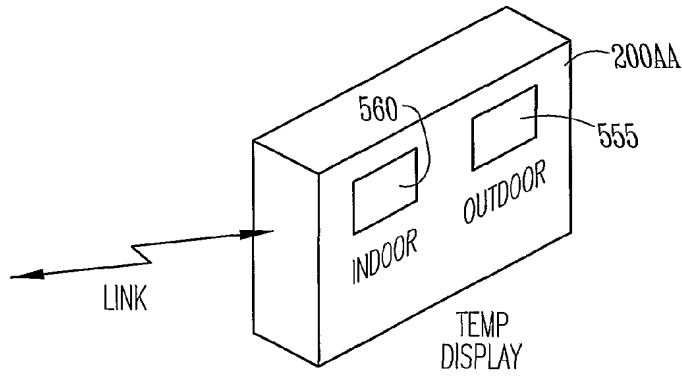


Fig. 24

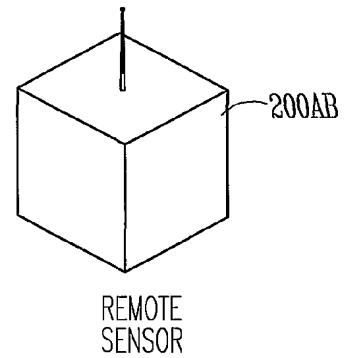


Fig. 25

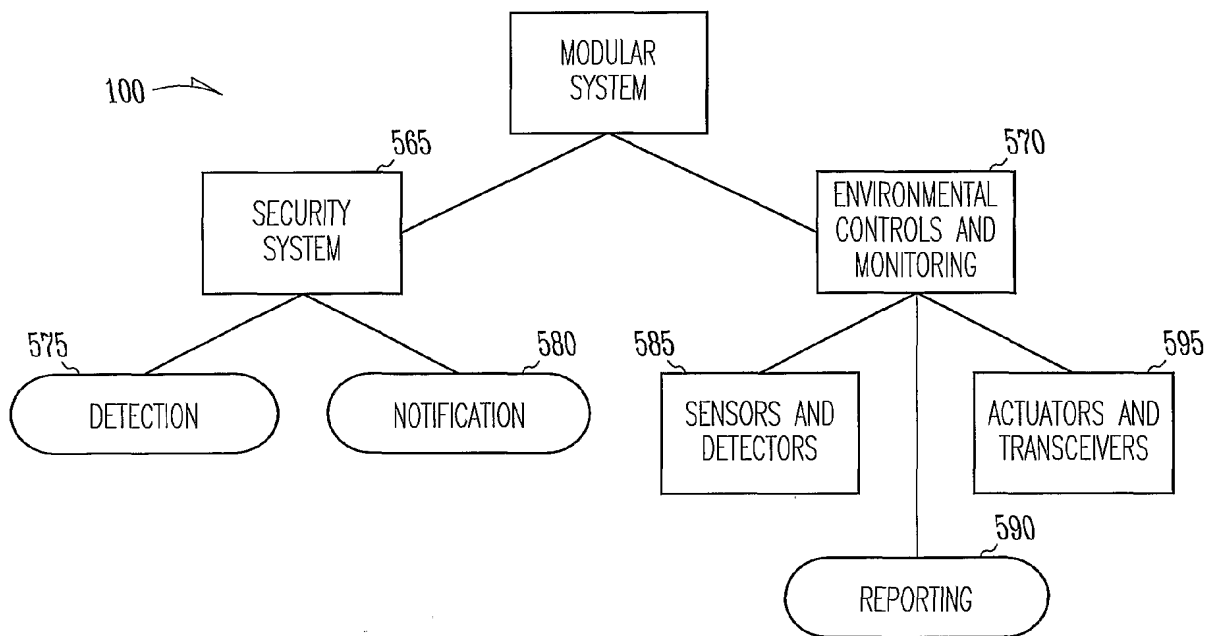
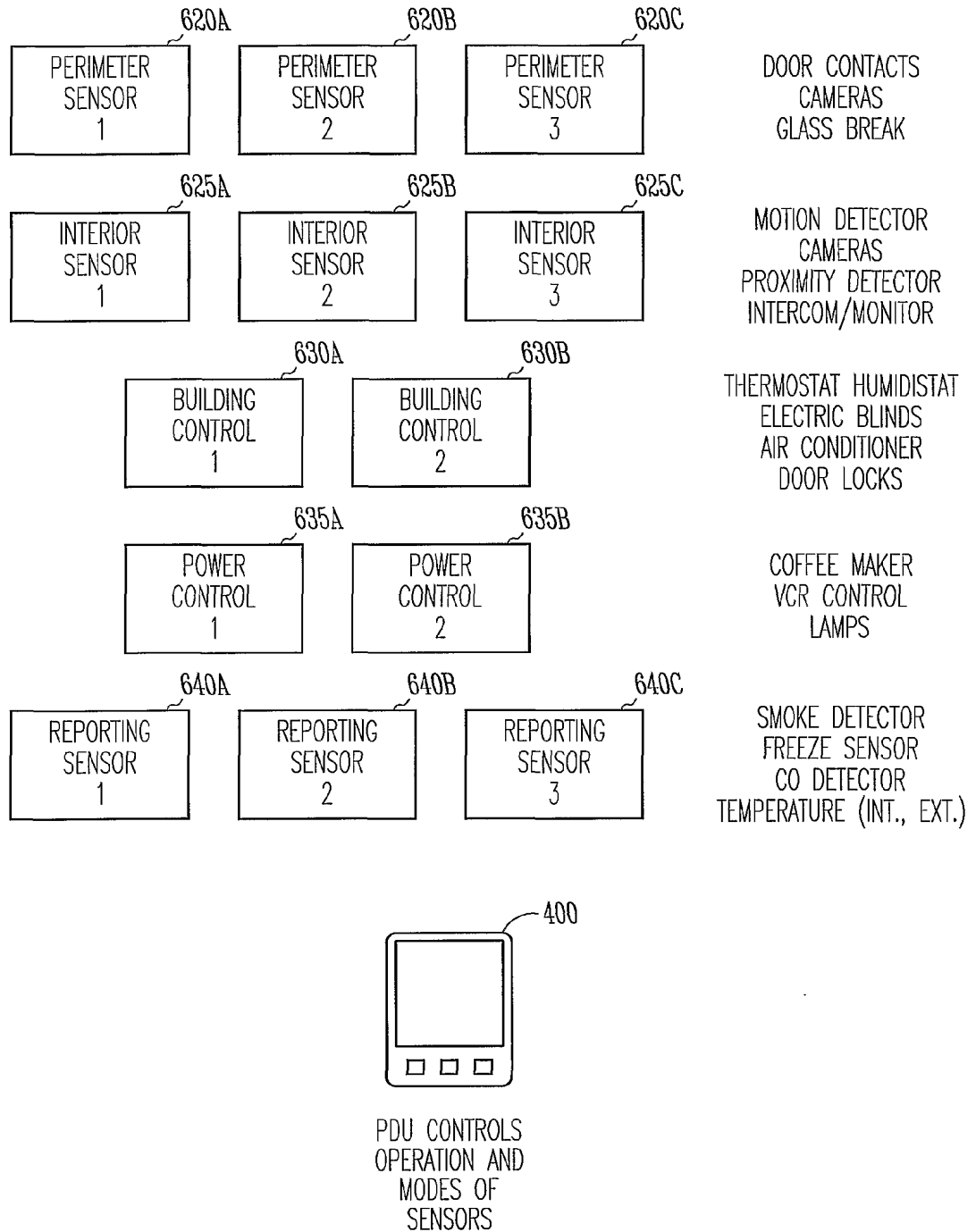


Fig. 26

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*Fig. 27*

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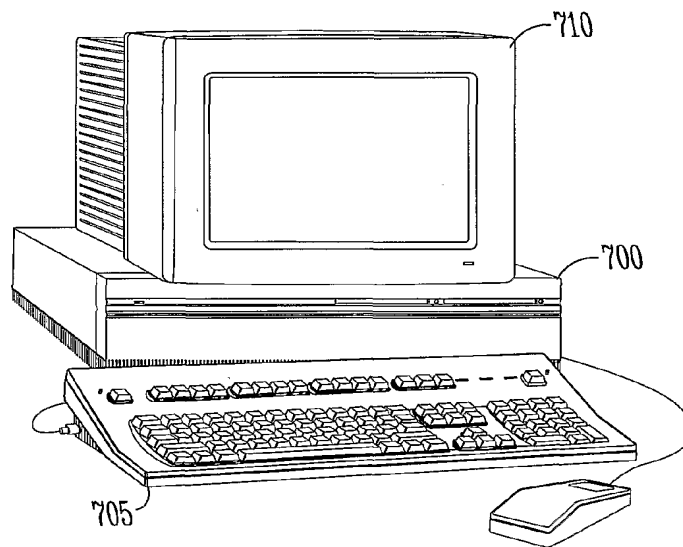


Fig. 28

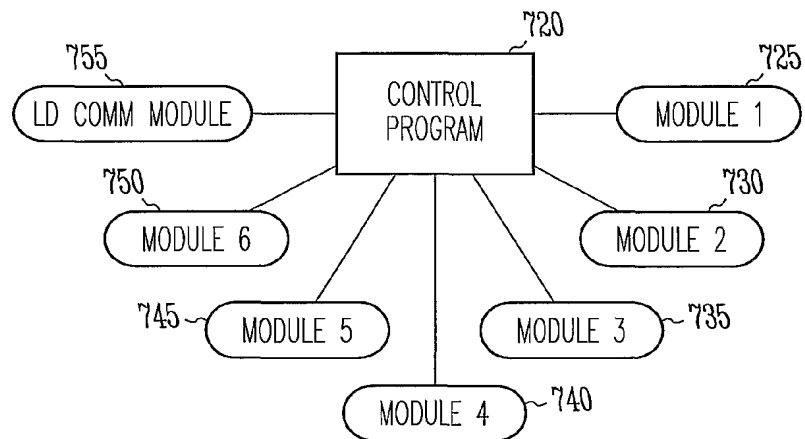


Fig. 29

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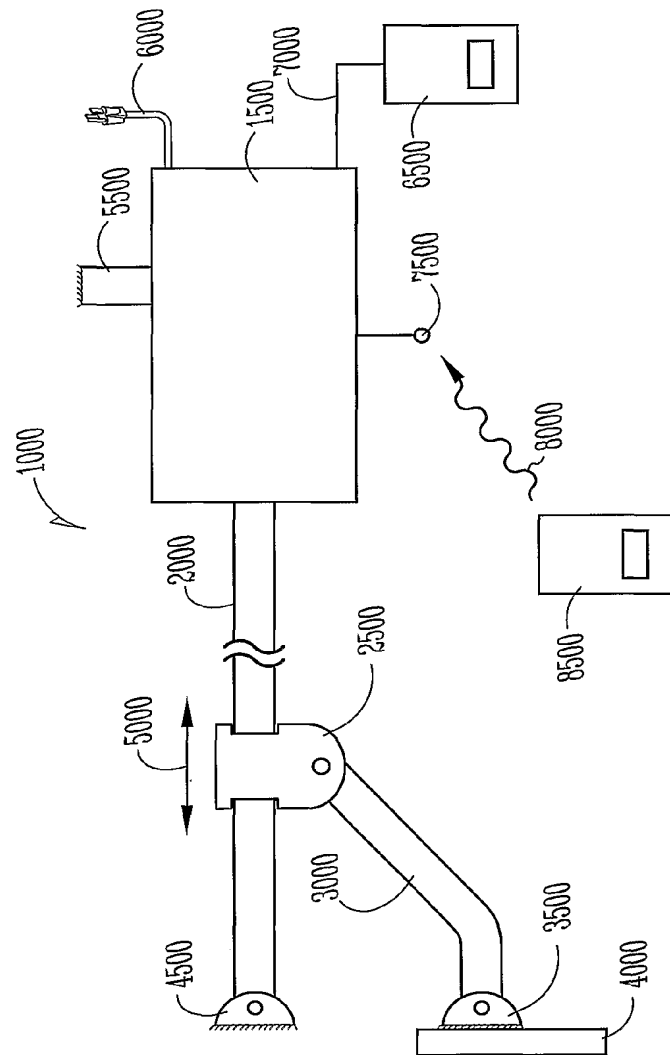
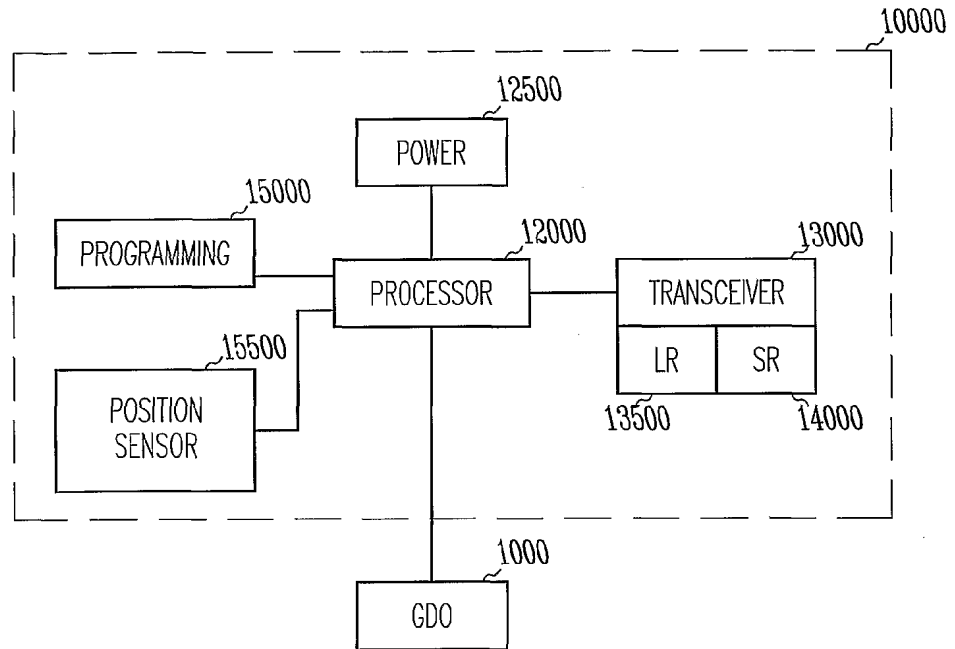
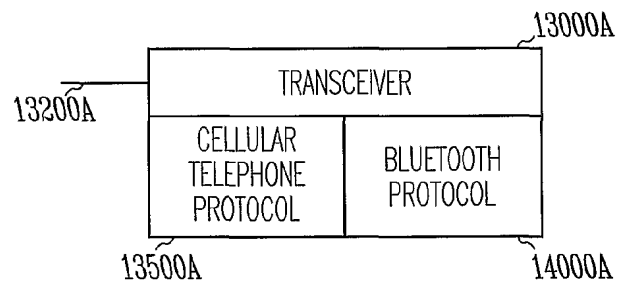


Fig. 30

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*Fig. 31**Fig. 32*

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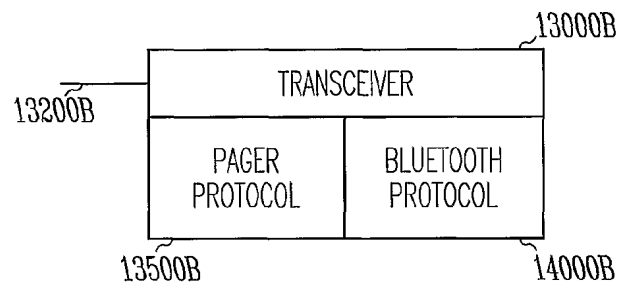


Fig. 33

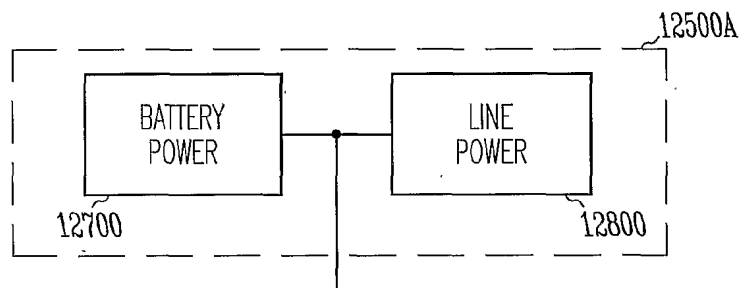
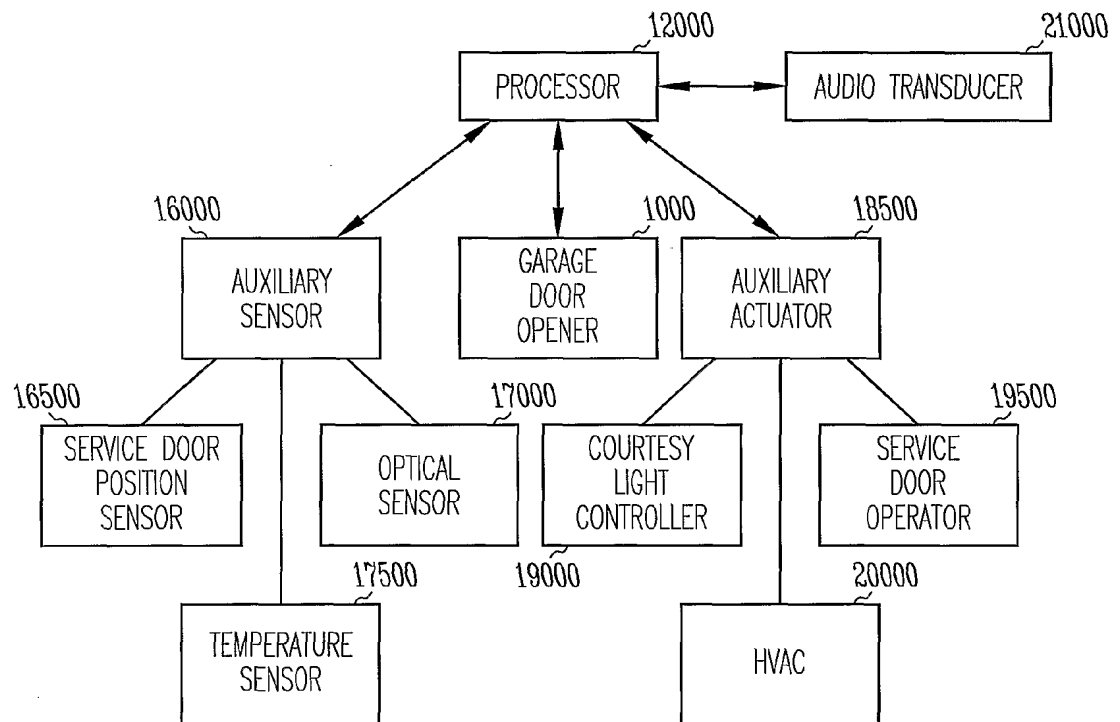


Fig. 34

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*Fig. 35*

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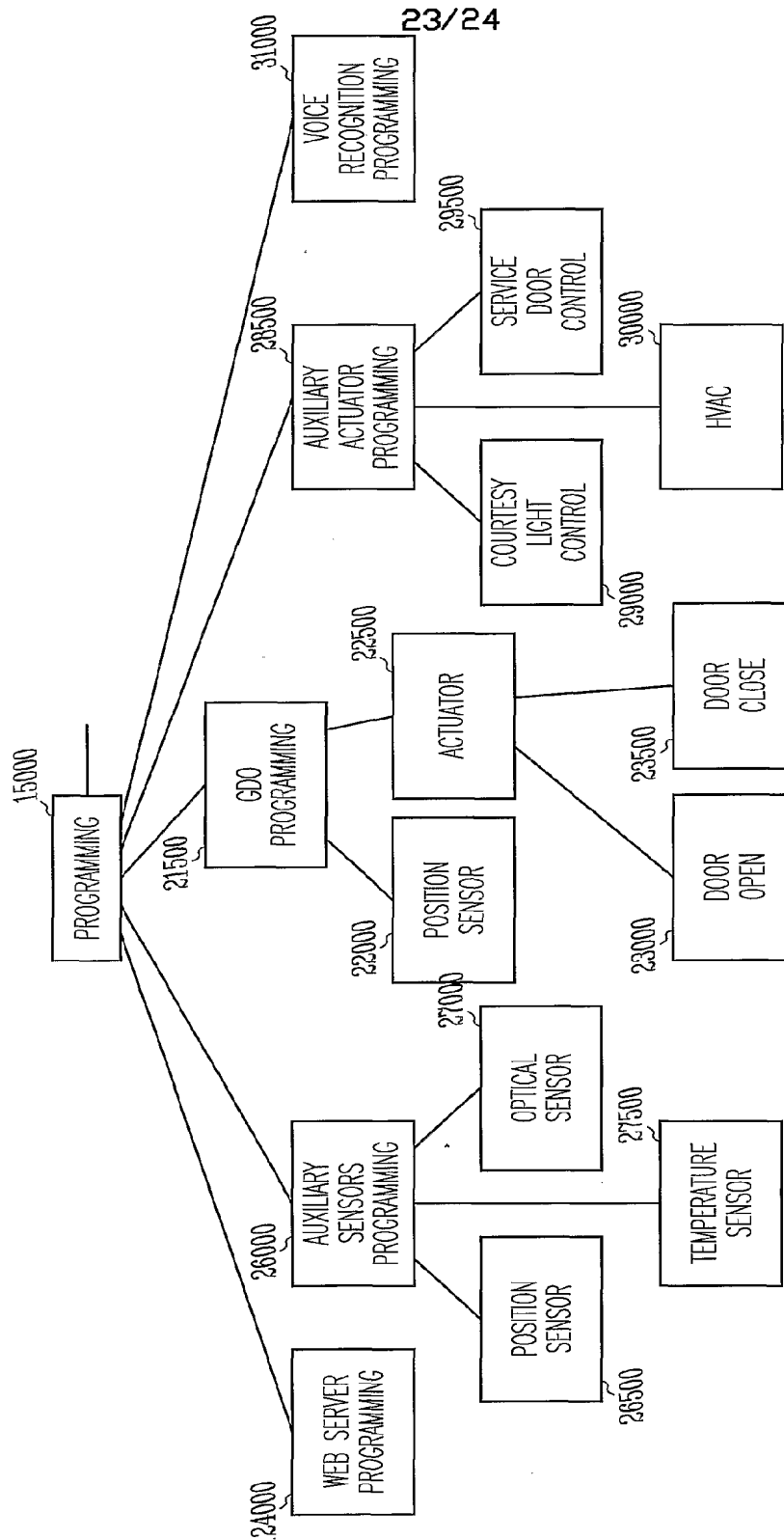
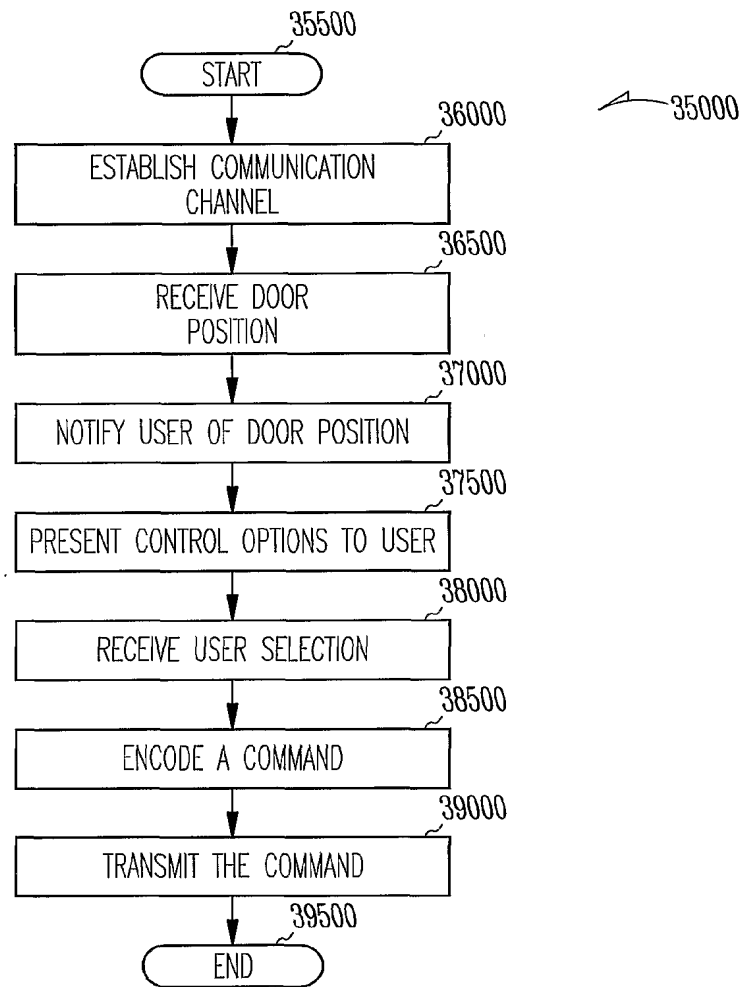


Fig. 36

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*Fig. 37*

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/17300**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) :G08B 1/08

US CL :340/539,426,425.5,457,825.32,825.36,825.37,825.49

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 340/539,426,425.5,457,825.32,825.36,825.37,825.49

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,917,405 A (JOAO) 29 June 1999, abstract, lines 1-15	1-103

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"G" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 01 JULY 2001	Date of mailing of the international search report 30 OCT 2001
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-5230	Authorized officer DARYL C. POPE Telephone No. (703) 305-4838

Form PCT/ISA/210 (second sheet) (July 1998)*

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UNITED STATES
PATENT AND TRADEMARK OFFICEP.O. Box 1450
Alexandria, VA 22313 - 1450
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APPLICATION #
90/019,542RECEIPT DATE / TIME
11/11/2024 10:13:50 PM Z ETATTORNEY DOCKET #
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Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 67921010

FILING DATE 08/15/2024

CUSTOMER # 178493

FIRST NAMED
INVENTOR - 7583191CORRESPONDENCE
ADDRESS -

AUTHORIZED BY -

Documents

TOTAL DOCUMENTS: 8

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Response_to_Notice-Final.pdf	96	Reexam Timely Patent Owner's Stmtnt in Resp to Order	1003 KB
Exhibit_A_Final.pdf	78	Reexam Miscellaneous Incoming Letter	382 KB
KR20010084277A - Remote security system for coming and out - Google Patents.pdf	7	Foreign Reference	309 KB
WO2000038174A1.pdf	22	Foreign Reference	859 KB
WO2001065875A1.pdf	13	Foreign Reference	648 KB
IDS_June2024.pdf	5	Information Disclosure Statement (IDS) Form (SB08)	1314 KB
Corrected Menard	92	Foreign Reference	5062 KB

WO0193220_Redacted.pdf

KR20010084277A.pdf

19

Foreign Reference

1246 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
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Exhibit_A_Final.pdf	C7DDFC13A689DE80B0208AF28CDEA77EA44CD433AFF33356 80B8912FAE46DC06EBDEB3F261F0FE54FFE078119E1A7CF8 F86EE6FFF5218B50C9C316FB0881AD09
KR20010084277A - Remote security system for coming and out - Google Patents.pdf	28FC9486FA147D7A4B973ED94F611F1C108F008631794B585B 2AEE5D14E6E567116F4A9D7F54F9485F2A9FE3222607CBC7C 8B613209A4684FBFD17C30E7A6364
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Corrected Menard WO0193220_Redacted.pdf	15172DDBF95F90981D294F6C2DF142D15967FF8440DADB01A 1EE95E70FA37C42B6A05D16306EDE3E5D22DB1B5BA3C494F 07B7C0F044131C77A233ACCAA3302EC
KR20010084277A.pdf	96A905CD27F8E94627F093DB8E16E03B136B1EECD16EDC4C 8D43C7E91E232C66289FC170800ACD1B78F756C02B453826A C3851C3B591DBEFB9E072F4D637E427

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If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

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If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage

submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Owner/Assignee: Duke W. Zinser	§	
	§	Group Art Unit: 3992
Control No.: 90/019,542	§	
	§	Examiner: Linh M. Nguyen
Filed: August 15, 2024	§	
	§	Confirmation: 4697
For: Security System and Method for	§	
Use of Same	§	

CERTIFICATE OF EFS-WEB FILING

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on November 11, 2024.

/Kirby Drake/ _____
Kirby Drake

AMENDMENT AND RESPONSE TO ORDER GRANTING REEXAMINATION

Patent Owner acknowledges receipt of the Order Granting Reexamination dated September 26, 2024 (the “Order”). In response, Patent Owner respectfully requests entry of the following amendments and consideration of the accompanying remarks.

Amendments to the Claims begin on page 2.

Remarks/Arguments begin on page 34.

AMENDMENTS TO THE CLAIMS

1. (Amended) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker; [and]

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit[.]; and

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications; and

wherein the control unit is capable of receiving audio communications from the cellular telephone.

8. (Amended) A method for providing doorbell monitoring, the method comprising:

- ringing of a doorbell at an entry point;
- responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;
- relaying at least a portion of the captured visual and audio communications to a cellular phone;
- rendering the least a portion of the captured visual and audio communications at the cellular phone;
- capturing audio communications at the cellular phone;
- relaying the audio communications from the cellular phone to the entry point; [and]
- rendering the audio communications at the entry point[.] via a communications unit;
- wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit;
- sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera;
- receiving at the control unit a request to send additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point;
sending video communications before the proximity detector is actuated; and
authenticating a homeowner before rendering at least a portion of the captured visual and
audio communications at the cellular phone;

wherein the doorbell is part of the single communications unit which also comprises the
camera, the proximity detector, a microphone, and a speaker.

14. (Canceled).

21. (New) The doorbell monitoring system of claim 1,
wherein the proximity detector detects a person proximate to the entry point;
wherein the detection by the proximity detector of the person proximate to the entry point
provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second
triggering event, capture entry point visual and audio communications at the entry point and
wirelessly stream the captured entry point visual and audio communications data to the control
unit.

22. (New) The doorbell monitoring system of claim 1, wherein the single
communications unit is configured to capture additional video from the video camera after the
triggering event.

23. (New) The doorbell monitoring system of claim 22, wherein the single
communications unit is configured to capture additional video from the video camera after a
second triggering event.

24. (New) The doorbell monitoring system of claim 22,
wherein the single communications unit is configured to capture additional video from

the video camera after a second triggering event;

wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

25. (New) The doorbell monitoring system of claim 1, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

26. (New) The doorbell monitoring system of claim 25, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

27. (New) The doorbell monitoring system of claim 1,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;
and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

28. (New) The doorbell monitoring system of claim 1,

wherein the control unit is capable of displaying the entry point visual and audio

communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

29. (New) The doorbell monitoring system of claim 1, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

30. (New) The doorbell monitoring system of claim 1, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

31. (New) The doorbell monitoring system of claim 1, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

32. (New) The doorbell monitoring system of claim 1, wherein the cellular telephone

comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

33. (New) The doorbell monitoring system of claim 32, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

34. (New) The doorbell monitoring system of claim 1, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

35. (New) The doorbell monitoring system of claim 1, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

36. (New) The system of claim 34, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

37. (New) The system of claim 34, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

38. (New) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry way, the activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry way, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio

communications at the entry way and transmitting the captured visual and audio

communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor;

wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit;

wherein the control panel is capable of allowing an individual to manage a security

system;

wherein the alarm system interface of the control panel is capable of interfacing with the security system;

wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime;

wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed; and

wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.

39. (New) The doorbell monitoring system of claim 38,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

40. (New) The doorbell monitoring system of claim 38, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before the proximity detector is triggered or the doorbell is triggered.

41. (New) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio

communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

42. (New) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

43. (New) The doorbell monitoring system of claim 42, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

44. (New) The doorbell monitoring system of claim 42, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;

wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

45. (New) The doorbell monitoring system of claim 38,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

46. (New) The doorbell monitoring system of claim 38,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

47. (New) The doorbell monitoring system of claim 44, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

48. (New) The doorbell monitoring system of claim 38, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio

communications captured by the communications unit.

49. (New) The doorbell monitoring system of claim 38, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

50. (New) The doorbell monitoring system of claim 49, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

51. (New) The doorbell monitoring system of claim 38, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

52. (New) The doorbell monitoring system of claim 38, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

53. (New) The system of claim 51, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

54. (New) The system of claim 51, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

55. (New) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry way, the video camera

and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is capable of storing the entry point visual and audio communications captured by the communications unit in a data storage unit of the control unit;

wherein the control panel is capable of allowing an individual to manage a security system;

wherein an alarm system interface of the control panel is capable of interfacing with the security system;

wherein the control unit is capable of receiving the entry point visual and audio communications captured by the communications unit before actuation of the proximity detector located in the doorway or if the doorbell is pressed;

wherein the control unit is capable of receiving additional audio or video from the video camera after actuation of the proximity detector;

wherein the doorbell monitoring system is capable of establishing communication with the control unit upon actuation of the doorbell;

wherein at least a portion of the initial communication after the doorbell is actuated is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.

56. (New) The doorbell monitoring system of claim 55,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

57. (New) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

58. (New) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

59. (New) The doorbell monitoring system of claim 58, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

60. (New) The doorbell monitoring system of claim 58,
wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;
wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by a proximity detector; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

61. (New) The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

62. (New) The doorbell monitoring system of claim 61, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

63. (New) The doorbell monitoring system of claim 55,
wherein the control unit is capable of displaying the entry point visual and audio

communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

64. (New) The doorbell monitoring system of claim 55,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

65. (New) The doorbell monitoring system of claim 55, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

66. (New) The doorbell monitoring system of claim 55, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

67. (New) The doorbell monitoring system of claim 55, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

68. (New) The doorbell monitoring system of claim 67, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

69. (New) The doorbell monitoring system of claim 55, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

70. (New) The doorbell monitoring system of claim 55, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

71. (New) The system of claim 69, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

72. (New) The system of claim 69, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

73. (New) A doorbell monitoring system comprising:
a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry way, the video camera
and the external microphone, responsive to the triggering event, for capturing visual and audio
communications at the entry way and transmitting the captured visual and audio
communications;

an external speaker disposed in the entry way, the external speaker for rendering received
audio communications;

a control unit in communication with the video camera, the doorbell, and the external
microphone, the control unit for communicating at least one portion of the visual and audio
communications received from the video camera and external microphone, and for
communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular
telephone for capturing cellular audio communications at the cellular telephone, transmitting the
cellular audio communications to the control unit, and rendering the at least one portion of entry
point communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, a microcontroller,
data storage unit and a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker,
and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the
control unit;

wherein the control unit is capable of storing the entry point visual and audio
communications in a data storage unit of the control unit;

wherein the alarm system interface of the control panel is capable of interfacing with a security system;

wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime;

wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed;

wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event; and

wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system.

74. (New) The doorbell monitoring system of claim 73,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

75. (New) The doorbell monitoring system of claim 73, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before the proximity detector is triggered or the doorbell is triggered.

76. (New) The doorbell monitoring system of claim 73, wherein the single

communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

77. (New) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

78. (New) The doorbell monitoring system of claim 77, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

79. (New) The doorbell monitoring system of claim 77,
wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;

wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by a proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and
wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

80. (New) The doorbell monitoring system of claim 73,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;
and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

81. (New) The doorbell monitoring system of claim 73,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;
wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

82. (New) The doorbell monitoring system of claim 73, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

83. (New) The doorbell monitoring system of claim 73, wherein the control unit is

configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

84. (New) The doorbell monitoring system of claim 73, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

85. (New) The doorbell monitoring system of claim 84, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

86. (New) The doorbell monitoring system of claim 73, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

87. (New) The doorbell monitoring system of claim 73, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

88. (New) The system of claim 86, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

89. (New) The system of claim 86, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

90. (New) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry way, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;

wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed; and

wherein the control unit is capable of receiving additional audio or video from the video

camera after actuation of the proximity detector.

91. (New) The doorbell monitoring system of claim 90,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

92. (New) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

93. (New) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

94. (New) The doorbell monitoring system of claim 93, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

95. (New) The doorbell monitoring system of claim 93,
wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;
wherein the doorbell is capable of recording visual and audio communications before any

type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

96. (New) The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

97. (New) The doorbell monitoring system of claim 96, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

98. (New) The doorbell monitoring system of claim 90,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is capable of authenticating a user of the system;
and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

99. (New) The doorbell monitoring system of claim 90,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

100. (New) The doorbell monitoring system of claim 90, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

101. (New) The doorbell monitoring system of claim 95, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

102. (New) The doorbell monitoring system of claim 90, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

103. (New) The doorbell monitoring system of claim 90, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions

after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

104. (New) The doorbell monitoring system of claim 103, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

105. (New) The doorbell monitoring system of claim 90, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

106. (New) The doorbell monitoring system of claim 90, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

107. (New) The system of claim 105, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

108. (New) The system of claim 105, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

109. (New) The method of claim 8, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

110. (New) The method of claim 8 further comprising:
communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

111. (New) The method of claim 8, further comprising:
storing at least a portion of the captured visual and audio communications by the single
communications unit at the control unit located locally to the entry point wherein the control unit
comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video
monitor communicatively coupled to the microcontroller.

112. (New) The method of claim 111, further comprising:
recording video after the proximity detector is triggered; and
sending the video recorded before and after the triggering of the proximity detector to the
cellular phone.

113. (New) The method of claim 8, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises
a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor
communicatively coupled to the microcontroller.

114. (New) The method of claim 8, further comprising:
providing an interface on the cellular phone that provides an option to request further
image or video data.

115. (New) The method of claim 8, further comprising:
providing an interface that provides an option to notify an alarm company.

116 (New) A method for providing doorbell monitoring, the method comprising:
ringing of a doorbell at an entry point;
responsive to the ringing of the doorbell, capturing visual and audio communications at
the entry point;
relaying at least a portion of the captured visual and audio communications to a cellular

phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point via a single communications unit;

wherein the single communications unit is configured to wirelessly stream the visual and audio communications via a wireless connection;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;

receiving at a control unit a request to send additional information regarding an event associated with the doorbell;

wirelessly streaming video communications from the single communications unit before the proximity detector is actuated; and

authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;

wherein the single communications unit also comprises a camera, the proximity detector, a microphone, and a speaker.

117. (New) The method of claim 116, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

118. (New) The method of claim 116, further comprising:

communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

119 (New) The method of claim 116, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

120. (New) The method of claim 119, further comprising:

recording video after the proximity detector is triggered; and
sending the video recorded before and after the triggering of the proximity detector to the cellular phone.

121. (New) The method of claim 116, further comprising:

activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

122. (New) The method of claim 116, further comprising:

providing an interface on the cellular phone that provides an option to request further image or video data.

123 (New) The method of claim 116, further comprising:

providing an interface that provides an option to notify an alarm company.

124. (New) A method for providing doorbell monitoring, the method comprising:

ringing of a doorbell at an entry point;

responsive to the ringing of the doorbell, capturing visual and audio communications at

the entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;

wherein the doorbell is part of a single communications unit which also comprises a camera, the proximity detector, a microphone, and a speaker;

wherein the camera is integrated into the doorbell;

sending from a control unit additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point;

wirelessly streaming video communications before the proximity detector is actuated; and

wirelessly streaming video communications after the proximity detector is actuated.

125. (New) The method of claim 124, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

126. (New) The method of claim 124, further comprising:

communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

127. (New) The method of claim 124, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

128. (New) The method of claim 127, further comprising:

recording video after the proximity detector is triggered; and
sending the video recorded before and after the triggering of the proximity detector to the cellular phone.

129. (New) The method of claim 124, further comprising:

activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

130. (New) The method of claim 124, further comprising:

providing an interface on the cellular phone that provides an option to request further image or video data.

131. (New) The method of claim 124, further comprising:

providing an interface that provides an option to notify an alarm company.

REMARKS/ARGUMENT

In the Order, the Examiners found two substantial new questions of patentability (“SNQ”). The first was: “Claims 1 and 19 are obvious over Von Bauer in combination with Menard.” (“First SNQ”). The second was: “Claims 8 and 14 are obvious over Von Bauer, Menard, and Klein.” (“Second SNQ”). Order, p. 4; 7.

Claims 1 and 8 have been amended as shown above.

Claim 14 has been cancelled.

As amended, Claim 1 is patentable over Von Bauer in combination with Menard. As originally issued, Claim 19 as will be shown below is patentable over the combination of Von Bauer and Menard.

Claim 8 as amended are patentable over the combination of Von Bauer, Menard, and Klein as will be shown below.

New Claims 21-131 are presented. Of these, Claims 38, 55, 73, 90, 116, and 124 are independent claims. (Claims 1, 8, 19, and 21-131 referred to herein as “Pending Claims”).

I. Discussion of Written Description Support for Amendments

Patent Owner provides the following explanation of support for each limitation added by the amendments shown above. Due to the number of New Claims submitted, Patent Owner/Assignee attaches the Table of Exhibit A demonstrating where the support for each limitation may be found. However, out of abundance of caution and to assist in the review, explanation of support for each limitation is provided below with reference to claim limitations as enumerated in Exhibit A. By the explanation as well as the Table of Exhibit A Patent Owner has (1) provided support pursuant to 35 U.S.C. § 1.530, (2) demonstrated that the limitations as

amended are well supported by the Specification as required under 35 U.S.C. § 112(1), (3) that no new matter has been entered, and (4) that no broadening amendments have been made.

In so far as there are any differences between the limitations recited below and the amendments listed above in the section “Amendments to the Claims”, the amendments listed above in the section “Amendments to the Claims” control.

A. Independent Claims 1, 19, 38, 55, 73, and 90

Claims 1, 19, 38, 55, 73, and 90 are independent system claims. Limitations 1.1-1.7, 38.1-38.7, 55.1-55.7, 73.1-73.7, and 90.1-90.7 are from the original claim 1.

Limitations 1.1, 19.1, 38.1, 55.1, 73.1, and 90.1 is the preamble which recite: “[a] doorbell monitoring system comprising.” A doorbell monitoring system is depicted at least in Fig. 1 and described throughout the specification.

Limitations 1.2, 19.2, 38.2, 55.2, 73.2, and 90.2 recite: “a doorway having an environment.” A doorway having an environment is depicted in Fig. 1 (element 18). A doorway having an environment is also described in the specification in reference to Fig. 1. Col. 2 ll. 11-21 (“includes a doorway 18 to a home having an environment 20.”).

Limitations 1.3, 19.3, 38.3, 55.3, 73.3, and 90.3 recite “a doorbell located in an entry way, the activation of the doorbell being a triggering event.” Doorbell is disclosed as a part of the communication portion which “includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29” in particular embodiments. Col. 2 ll. 13-17. As the video camera 22 and exterior speaker 28 are disclosed as “disposed in the doorway” the doorbell could also be located in an entry way based on the specification. Col. 2 ll. 22-24. Furthermore, POSA would understand that the doorbell could be located in an entry way. The activation of the

doorbell being a triggering event is also disclosed in the specification. *E.g.*, Col. 3 ll. 4-5 (“a triggering event such as ringing of a doorbell.”).

Limitations 1.4, 19.4, 38.4, 55.4, 73.4, and 90.4 recite: “a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications.” A video camera and an external microphone disposed in the entry way is depicted in Fig. 1 (elements 22 and 24). They are also described in the specification in reference to Fig. 1. Col. 2 ll. 22-23 (“A video camera 22 and an external microphone 24 are disposed in the doorway 18.”). The specification describes an embodiment capturing visual and audio communications at the entry way in response to actuation of the proximity detector. *See e.g.*, Col. 2 ll. 35-44 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted”). A POSA would understand that another triggering event, such as ringing of a doorbell, could also initiate the same. *See also* Col. 7 ll. 36-45, Col. 7 ll. 31-45 (where requesting and receiving additional video in response to visitor at a doorway is described).

Limitation 19.5 recites: “a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway.” A proximity detector disposed in the entry way is depicted in Fig. 1 (element 26). It is also described in the specification in reference to Fig. 1. Col. 2 ll. 23-24 (“A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18.”). The proximity detector actuating the video camera and the external microphone in response to an individual approaching the doorway is also described. Col. 2 ll. 35-38 (“In operation, an

individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.").

Limitations 1.5, 19.6, 38.5, 55.5, 73.5, and 90.5 recite: "an external speaker disposed in the entry way, the external speaker for rendering received audio communications." An external speaker disposed in the entry way is depicted in Fig. 1 (element 28). It is also described in the specification in reference to Fig. 1. Col. 2 ll. 23-24 ("A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18."). External speaker rendering received audio communications is also described in reference to Fig. 1. Col. 2 ll. 45-47 ("Similarly, the control unit relays captured cellular audio communications from the homeowner 16 to the external speaker 28."); Col. 6 ll. 8-9 ("At block 100, the audio communications are rendered at the entry point").

Limitations 1.6, 19.7, 38.6, 55.6, 73.6, and 90.6 recite: "a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker." A control unit is depicted in Fig. 2 (element 40). It is shown in Fig. 2 and described in the specification as in communication with the video camera, the doorbell, and the external microphone. It is also described as communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker. *E.g.*, Col. 3 ll. 9-26 ("A control unit portion 40, or control unit 40, controls a communication

portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44.”); Col. 4 ll. 32-35.

Limitations 1.7, 19.8, 38.7, 55.7, 73.7, and 90.7 recite: “a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.” A cellular telephone is depicted in Fig. 2 (element 30). It is shown in Fig. 2 and described in the specification as disposed remotely to the doorway and the control unit. It is also described as capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit. *E.g.*, Col. 3 ll. 27-30 (“The cellular telephone network or cellular network 44 is employed to relay visual and audio data from the control unit to the cellular telephone 30 and relay audio data and control signals from the cellular telephone 30 to the control unit 40.”); Col. 4 ll. 27-35.

Limitation 19.9 recites “thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.” This is described in the specification. *E.g.*, Col. 2 ll. 47-52 (“In this manner, the homeowner is permitted to monitor the home in substantially realtime while away and, further, the homeowner 16 and individual 34 are able to communicate as if the homeowner 14 was at home.”).

Limitations 1.8, 38.8, and 73.8 cover a control unit which comprises of several elements. This is supported by at least by depiction in Fig. 3 and the specification which lists the components of the control unit which are connected to the microcontroller. *E.g.*, Col. 5 ll. 7-16 (“the components of the control unit 40 which are connected to the microcontroller 60 include a

switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74 ... A video monitor 76 is coupled to the microcontroller 60"). A Person of Ordinary Skill in the Art ("POSA") would understand that the connection means a communicative connection between the elements. This specification also supports later limitations which introduce other elements such as OGM player/recorder.

Limitations 1.9, 38.9, 55.8, 73.9, and 90.8 recite: "wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit." This single communication unit is depicted generally in Fig. 2 and 3 as element 42, but also described in the specification. *E.g.*, Col. 3 ll. 9-26 ("the communication portion 42 includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29, which may included as part of the communication portion 42 in particular embodiments."); Col 4 ll. 64 - Col. 5 ll. 6 ("proximity detector 26 of the communication unit 42").

Limitations 38.10, 55.9, and 73.10 recite: "wherein the entry point visual and audio communications are wirelessly streamed to the control unit." Wirelessly streaming is supported by the specification. The specification describes that components of the system may be connected wirelessly. *E.g.*, Col. 3 ll. 17-26 ("each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology"). The specification also describes rendering realtime visual and audio data and streaming. Col. 5 ll. 57-60 ("The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone

24.”); Col. 8 ll. 39-40 (“Alternatively, streaming audio and video may be delivered.”). In combination with wireless connections above, POSA would understand that visual and audio communications necessarily can be wirelessly streamed in the system. Therefore, wireless streaming is supported by the specification generally. The captured video and audio communications being streamed is also described. *E.g.*, Col. 2 ll. 36-44 (“At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 8 ll. 39-40 (“Alternatively, streaming audio and video may be delivered.”).

Limitation 38.11 recites: “wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor” which is supported by the specification. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitations 38.12, 55.10 and 73.11 recite: “wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit.” Limitation 55.10 additionally recites: “visual and audio communications captured by the communications unit.” This is supported by the specifications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”). Since the video camera 22 and exterior microphone 24 is part of the communications unit, 55.10 is also supported.

Limitations 38.13 and 55.11 recite: “wherein the control panel is capable of allowing an individual to manage a security system.” Specification supports with “the control panel 66 permits the homeowner or other individual to manage the security system 10.” Col. 5 ll. 39-40.

Limitations 38.14, 55.12, and 73.12 recite: “wherein the alarm system interface of the control panel is capable of interfacing with the security system” and variations thereof. The specification also describes “The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system.” Col. 5 ll. 42-44.

Limitations 38.15 and 73.13 recite: “wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime.” This is supported by the specification. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitations 38.16, 55.13, 73.14, and 90.10 recite: “wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed” and variations thereof. This is supported by the specification which describes receiving entry point visual and audio data “even prior” to actuation of the proximity detector. Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).

Limitations 38.17 and 73.15 recite: “wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.” The specification describes “a triggering event such as the ringing of a doorbell, initiates the contact of the control

unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.” Col. 3 ll. 6-8. Therefore, the specification supports additional audio or video from the video camera after the triggering event. Furthermore, the specification also describes requesting and receiving additional data after the triggering event. Col. 7 ll. 36-45; *see* Col. 7 ll. 31-45. Therefore, a POSA would understand that the control unit would be capable of receiving additional audio or video from the video camera after the triggering event.

Limitations 55.14 and 90.11 recite: “wherein the control unit is capable of receiving additional audio or video from the video camera after actuation of the proximity detector.” This reflects the operation contemplated in the specification. *E.g.*, Col. 2, ll. 35-38 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.”); Col. 6 ll. 14-18 (“As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively.”).

Limitation 55.15 recites: “wherein the doorbell monitoring system is capable of establishing communication with the control unit upon actuation of the doorbell.” This is also a reflection of the operation in the specification. *E.g.*, Col. 4 ll. 49-51 (“the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30.”).

Limitation 55.16 recites: “wherein at least a portion of the initial communication after the doorbell is actuated is a notification sent to the cellular telephone.” The specification supports

this limitation. *E.g.*, Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”).

Limitation 55.17 recites: “wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.” The specification supports this limitation. *E.g.*, Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).

Limitation 73.16 recites: “wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system.” A menu of options provided to the user is described in the specifications. Col. 6 ll. 56-67; *see also* Table 2. Options being activated using a voice activation system is also described. Col. 6 ll. 56-67 (“Alternatively, for example, a voice activated system may be utilized.”).

Limitation 1.10 and 90.9 recite: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications.” Specification describes an OGM player/recorder which is a device for presenting pre-recorded messages to visitors. Col. 5 ll. 27-35. Playing a pre-recorded message is also described in the specification. Col. 6 ll. 52-55 (“Additionally, the homeowner may preprogram the control unit to play a pre-recorded message from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.”); Col. 7 ll. 22-35 (“Option 2: Play a Pre-Recorded Greeting”). Furthermore, a POSA would understand that the pre-recorded message would be played on the communications unit which contains an external speaker.

Limitation 1.11 recites: “wherein the control unit is capable of receiving audio communications from the cellular telephone.” This is supported by the specification. *E.g.*, Col. 2

ll. 35-44; Col. 2 ll. 45-47 (“the control unit relays captured cellular audio communications”).

B. Dependent Claims 21-37, 39-54, 56-72, 74-89, 91-108

Claims 21-37, 39-54, 56-72, 74-89, 91-108 are dependent claims to claims 1, 38, 55, 73, and 90 respectively. Many of the dependent claims are repeated. Only exemplary dependent claims, 21-37, 40-41 are explained below.

Limitation 21.1 is a preamble which recites: “[t]he doorbell monitoring system of claim 1.”

Limitation 21.2 recites: “wherein the proximity detector detects a person proximate to the entry point.” A proximity detector is depicted in Fig. 1 (element 26). It is also described as part of the single communications unit. Col 4 ll. 64 - Col. 5 ll. 6 (“proximity detector 26 of the communication unit 42”). Proximity detector detecting a person proximate to the entry point is also described. Col. 2 ll. 35-36 (“an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated.”).

Limitation 21.3 recites: “wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event.” Detection by the proximity detector of a person proximate to the entry point as a triggering event is described in the specification. Col. 2 ll. 35-36 (“an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated.”); Col. 6 ll. 14-16 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block”). A POSA would understand from the description that the actuation of the proximity detector would constitute a triggering event.

Limitation 21.4 recites: “wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio

communications data to the control unit.” This reflects a contemplated operation. Col. 2 ll. 36-44 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 6 ll. 16-21 (“in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit.”).

Limitation 22 recites: “[t]he doorbell monitoring system of claim 1, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.” The single communications system configured to capture additional video from the video camera after the triggering event is described in the specifications. The specification describes “a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.” Col. 3 ll. 6-8. Furthermore, the specification describes that “the video camera 22 may be integrated into the doorbell 29 ... that the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30.” Col. 4 ll. 46-51. Therefore, the specification supports additional audio or video from the video camera after the triggering event. Furthermore, the specification also describes requesting and receiving additional data after the triggering event. Col. 7 ll. 36-45; *see* Col. 7 ll. 31-45. Therefore, a POSA would understand that the control unit would be capable of receiving additional audio or video from the video camera after the triggering event.

Limitations 23 and 24.1 recite: “[t]he doorbell monitoring system of claim 22, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.” This limitation is similar to limitation 21.4 and finds substantially similar support as well.

Limitation 24.2 recites: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event.” This is similar to limitations 38.16, 55.13, 73.14, and 90.10 above and finds the same support. Col. 6 ll. 21-24.

Limitation 24.3 recites: “wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector.” Support for wirelessly streaming is shown for limitation 1.10 above. Doorbell wirelessly streaming video communications after detection by a proximity detector is described in the specifications. Col. 2 ll. 35-41 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit “); Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).

Limitation 24.4 recites: “wherein the doorbell monitoring system comprises an alarm system interface” which is supported by the specification. Col. 5 ll. 7-11 (“the components of the control unit 40 ... include ... an alarm system interface 68”).

Limitation 24.5 recites: “wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and

the single communications unit after a triggering event.” This is supported by the specification. Col. 4 ll. 21-26 (“In the instances when data is transferred to or from the cellular telephone via the Internet, the cellular network 44 may include onsite (or home) or offsite servers that are setup by a security company or the homeowner to facilitate the transfer of the data.”).

Limitation 25 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.” This is supported by the specification. Col. 5 ll. 55-57 (“data stored on the data storage unit 74 may be transferred to a different medium or played on a video monitor 76.”); Col. 6 ll. 15-20 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor”).

Limitation 26 recites: “The doorbell monitoring system of claim 25, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.” The specification describes displaying the entry point visual and audio communications in realtime. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitations 27.1 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime” which is supported by the specification. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially

realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitation 27.2 recites: “wherein the doorbell monitoring system is capable of authenticating a user of the system” which is supported by the specification. Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).

Limitation 27.3 recites: “wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Authentication one or more communications related to the doorbell monitoring system is described in the specifications. *E.g.*, Col. 6 ll. 39-55; Col. 8 ll. 15-18. Specifically, at least a call authentication is described in the specification. Col. 6 ll. 42-49.

Limitations 28.1-28.3 are repetition of limitations 27.1-27.3 and finds the same support.

Limitation 28.4 additionally recites: “wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector.” Doorbell capable of transmitting video communications after detection by a proximity detector is described in the specifications. Col. 2 ll. 35-44 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”).

Limitation 28.5 recites: “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone;” The separate communication network is depicted in Fig. 2. Also, the communication

between doorbell and control panel is described in the specifications. Col. 3 ll. 9-26. The communication between the control panel to the cellular phone is distinctly described in the specifications. Col. 3 ll. 27-34, *see also*, Table 1.

Limitations 28.6 and 29 recite: “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” This is a similar limitation to limitations 38.12, 55.10 and 73.11 above and finds the same support.

Limitation 30.1 recites: “[t]he doorbell monitoring system of claim 1, wherein the alarm system interface is connected to an alarm system” which is disclosed in the specifications. Col. 5 ll. 42-44 (“The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system.”).

Limitation 30.2 recites: “wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.” Specification describes that “The video monitor 76 and interior microphone 80, when used together, provide a traditional monitor with intercom system for the homeowner.” Col 5. ll. 63-65. Furthermore, a menu which is an interface that allows user of a cellular telephone to take an action is described in the specification. Col. 6 ll. 56-67; *see also*, Table 2. A POSA would understand that the traditional video monitor would have a graphical user interface to allow an individual to manage the alarm system.

Limitation 31 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.” This is supported by the specification. *E.g.*, Col 6 ll. 28-34 (“the control unit generates an image or video file that

includes at least a portion of the visual or audio/visual data collected by the video camera and the exterior microphone.”).

Limitation 32 and 33 regards a cellular telephone interface with several options. The interface and options are described and supported in the specification. Col 6 ll. 56-67; Col. 7 ll. 22-35; Col. 7 ll. 52-65; *see also*, Table 2.

Limitations 34 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.” At least the data storage is an onsite storage device. *See* Col. 5 ll. 7-16 (“components of the control unit 40 ... include ... a data storage unit 74”); *see also* Col. 3 ll. 17-19. (“Preferably, the control unit 40 is located onsite”) Data storage unit is described as capable of storing entry point visual and audio communications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).

Limitation 35 recites: “[t]he doorbell monitoring system of claim 1, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.” This is supported by the specification. *E.g.*, Col. 2 ll. 36-40 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”); Col. 5 ll. 55-57 (“Moreover, data stored in the data storage unit 74 may be transferred to a different medium or played on the video monitor 76.”).

Limitation 36 recites: “[t]he system of claim 34, wherein wherein the onsite storage

device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.” This is supported by the specification. *E.g.*, Col. 2 ll. 53-58 (“Accordingly, the security system 10 and accompanying method presented herein permit the homeowner 16 or designated entity or individual, who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.”); Col. 8 ll. 4-8 (“The operations of blocks 132 and 134 permit the homeowner who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.”).

Limitation 37 recites: “[t]he system of claim 34, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.” Wired connections are supported by the specification generally. *E.g.*, Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by a wired connection”); Col. 5 ll. 16-19 (“It should be appreciated that these components described in FIG. 3 may be connected to the microcontroller 60 and interconnected by wired connections, wireless connections, or a combination thereof.”).

Limitations 40 and 41 are similar to limitation 1.10 above and finds the same support. However, limitation 40 and 41 discloses single communication unit “capturing video before the proximity detector is triggered or the doorbell is triggered” and “capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.” This is described in the specification. Col. 3 ll. 1-8 (“The video cameras 22 may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing

of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.”); Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).

C. Independent Claims 8, 116, and 124.

Claims 8, 116, and 124 are method claims. Limitations 8.1-8.7, 116.1-116.7 and 124.1-124.8 are from the original claim 1.

Limitations 8.1, 116.1, and 124.1 recite: “[a] method for providing doorbell monitoring, the method comprising.” A method for providing doorbell monitoring is at least depicted in Fig. 4. The method is also described in relation to Fig. 4 in the specification. *E.g.*, Col. 5 ll. 66 - Col. 6 ll. 12.

Limitations 8.2, 116.2, and 124.2 recite: “ringing of a doorbell at an entry point.” Ringing the doorbell at an entry point is disclosed in the specification. *E.g.*, Col. 3 ll. 4-6.

Limitations 8.3, 116.3, and 124.3 recite: “responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point.” Capturing visual and audio communications at the entry point is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 90, visual and audio communications are captured at an entry point.”). A POSA would understand that the process would be initiated from a triggering event which is the ringing of the doorbell. *E.g.*, Col. 3 ll. 4-5 (“a triggering event such as ringing of a doorbell.”) See also, Col. 7 ll. 36-45, Col. 7 ll. 31-45 (where requesting and receiving additional video in response to visitor at a doorway is described).

Limitations 8.4, 116.4 and 124.4 recite: “relaying at least a portion of the captured visual and audio communications to a cellular phone.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 92, at least a portion of the captured visual and audio communications are relayed to a cellular telephone.”).

Limitations 8.5, 116.5, and 124.5 recite: “rendering the least a portion of the captured visual and audio communications at the cellular phone.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 94, the at least a portion of the captured visual and audio communications are rendered at the cellular telephone.”).

Limitations 8.6, 116.6, and 124.6 recite: “capturing audio communications at the cellular phone.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 96, audio communications are captured at the cellular phone.”).

Limitations 8.7, 116.7, and 124.7 recite: “relaying the audio communications from the cellular phone to the entry point.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“The audio communications are relayed from the cellular phone to the entry point at block 98.”).

Limitations 8.8, 116.8, and 124.8 recite: “rendering the audio communications at the entry point” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 100, the audio communications are rendered at the entry point”).

Limitations 8.8 and 116.8 also adds the phrase via the communications unit. As explained above, external speaker is described as part of the communications unit and therefore audio communication would be rendered through the communications unit.

Limitations 8.9 and 116.9 relate to wirelessly streaming visual and audio communications with the communications unit. Support for wirelessly streaming is shown above. *See* 1.10.

Communication unit configured to communicate the visual and audio communications via a wireless connection is depicted in Fig. 2 and described in the specification. Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).

Limitations 8.10, 116.10, 124.9 are generally recite: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection.” Sending a notification to the cellular phone is described in the specification. *E.g.*, Col. 2 ll. 35-44 (where actuation of the proximity detector initiating communication to the cellular telephone is described); Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”). Range of detection is inherent in a proximity detector. Therefore, a POSA would understand that a proximity detector would be set with a predetermined range of detection.

Limitations 8.11 and 116.11 recite: “receiving at the control unit a request to send additional information regarding an event associated with the doorbell.” This is supported by the specification. Col 4. ll. 57-64 (“In response to the notification, the homeowner 16 may send a signal to the control unit portion 40 to either ignore the notification and event or accept more information including images or video about the notification and event.”).

Limitations 8.12 and 124.13 recite: “notifying a home security company when an emergency event occurs at the entry point” which is supported by the specification. *E.g.*, Col. 5 ll. 45-48 (“notify a home security company or the police department in the instance of a break-in or other crime.”); Col. 7 ll. 54-59 (“Option 6: Notify Alarm Company allows the homeowner to

notify the alarm company or alternatively the police department of a potential or actual problem.”).

Limitations 8.13, 116.12, and 124.14 recite: “sending video communications before the proximity detector is actuated”, “wirelessly streaming video communications from the single communications unit before the proximity detector is actuated”, and “wirelessly streaming video communications before the proximity detector is actuated” This is substantially similar to limitations 38.16, 55.13, 73.14, and 90.10 and finds the same support.

Limitations 8.14 and 116.13 recite: “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;” This is a step contemplated in the specification. *E.g.*, Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated. By way of example, in one implementation, the homeowner may be required to enter a passcode to authenticate the identity of the homeowner. If the homeowner does not enter the passcode, then the call is disconnected.”).

Limitations 8.15, 116.14, and 124.10 recite: “wherein the doorbell is part of the single communications unit which also comprises the camera, the proximity detector, a microphone, and a speaker” and variations thereof. These are similar limitations as limitations 1.9, 38.9, 55.8, 73.9, and 90.8 above and finds the same support.

Limitation 124.11 recites: “wherein the camera is integrated into the doorbell” which is supported by Col. 4 ll. 46-51 “the video camera 22 may be integrated into the doorbell 29.”

Limitation 124.12 recites: “sending from a control unit additional information regarding an event associated with the doorbell” which is a step contemplated in the specification. *E.g.*, Col. 4. ll. 56-64 (“the homeowner 16 may send a signal to the control unit portion 40 to either

ignore the notification and event or accept more information including images or video about the notification and event.”).

Limitation 124.15 recites: “wirelessly streaming video communications after the proximity detector is actuated.” This is similar to limitations 55.14 and 90.11 and finds the same support.

D. Dependent Claims 110-115, 117-123, and 125-131

Claim 109-115, 117-123, and 125-131 are dependent claims to independent claims 8, 116, and 124 respectively. The dependent claims are repeated. Only exemplary dependent claims, 109-115 are explained below.

Limitation 109 recites “[t]he method of claim 8, wherein rendering at the cellular phone further comprises: rendering a menu option that when selected would take no action based upon an actuation of a security system.” Menu options are covered above and menu option for no action is described in the specifications. Col. 7 ll. 15-21 (“Option 1: No Action”).

Limitation 110 recites: “[t]he method of claim 8 further comprising: communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.” This is supported by the specification. *E.g.*, Col. 3 ll. 9-26 (“A control unit portion 40, or control unit 40, controls a communication portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44.”); Col. 4 ll. 32-35.

Limitation 111.1 recites: “[t]he method of claim 8, further comprising: storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point.” This is supported by the specification. Col. 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for

storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).

Limitation 111.2 recites: “wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” This is similar to limitations 1.8, 38.8, and 73.8 and finds the same support.

Limitation 112 recites: “[t]he method of claim 111, further comprising: recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” This is supported by the specification. Col. 6 ll. 14-19 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively ... At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114. At the control unit, in one implementation, the data is stored in the data storage.”).

Limitation 113.1 recites: “[t]he method of claim 8, further comprising: activating an alarm system interface via a control unit.” Step of activating an alarm system interface via a control unit is described in the specifications. Col. 5 ll. 39-48 (“In one implementation, the control panel 66 is onsite as well as accessible through the cellular telephone 30 ... By way of example, this feature permits the homeowner to utilize the cellular telephone 30 to notify a home security company or the police department in the instance of a break-in or other crime.”); Col. Col 7 ll. 54-59 (“Option 6: Notify Alarm Company”).

Limitation 113.2 recites: “wherein the control unit comprises a switch, a control panel, an

alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” This is similar to limitations 1.8, 38.8, and 73.8 and finds the same support.

Limitation 114 recites: “[t]he method of claim 8, further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.” Interface on a cellular phone that provides an option to request further image or video data is described in the specification. Col. 6 ll. 56-67; *see also*, Table 2; Col 7 ll. 36-48 (“Option 3: Request Further Image or Video Data”).

Limitation 115 recites: “[t]he method of claim 8, further comprising: providing an interface that provides an option to notify an alarm company.” Interface on a cellular phone that provides an option to notify an alarm company is described in the specification. Col. 6 ll. 56-67; *see also*, Table 2; Col 7 ll. 54-59 (“Option 6: Notify Alarm Company”).

Thus, by all the above and Table of Exhibit A, Patent Owner/Assignee has (1) provided support pursuant to 35 U.S.C. § 1.530, (2) demonstrated that the limitation as amended are well supported by the specification, (3) that no new matter has been entered, and (4) that no broadening amendments have been made.

II. Pending Claims are Patentable Over the Prior Art

A. Discussion of the Law of Obviousness

Where a single prior art reference does not anticipate a claim, the claim may nevertheless be invalid for obviousness. 35 U.S.C. § 103(a). A claim “is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); *see also Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017). “As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is

stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).” M.P.E.P. § 2141. The “Graham” factors are as follows: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the claimed invention and the prior art; (3) resolving the level of ordinary skill in the art; and (4) objective evidence, that is, “secondary considerations.” *Id.*

After consideration of the *Graham* factors, an obviousness determination requires two separate factual findings:

[1] a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and [2] that the skilled artisan would have had a reasonable expectation of success in doing so.

Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd., 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (quoting *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012); *Eli Lilly & Co. v. Teva Pharms. Int’l GmbH*, 8 F.4th 1331, 1344 (Fed. Cir. 2021). Both inquiries are questions of fact. *Id.*; *Virtek Vision Int’l ILC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886 (Fed. Cir. 2024).

It is axiomatic that a difference between anticipation and obviousness is that each limitation need not be present in a single piece of prior art for the invention to be obvious. To prove obviousness, all of the limitations must be present in the combination of references relied upon. *Application of Royka*, 490 F.2d 981, 985 (CCPA 1974); *Roku, Inc. v. ITC*, 90 F.4th 1367, 1374 (Fed. Cir. 2024) (affirming ITC findings on nonobvious where administrative judge found that one limitation was missing from the combination); *see also Intellectual Ventures I, LLC v. Motorola Mobility LLC*, 176 F. Supp. 3d 405, 428 (D. Del. 2016), *aff’d in relevant part* 870 F.3d 1320 (Fed. Cir. 2017); *Upsher-Smith Labys., Inc. v. Pan American Labs., Inc.*, 2003 WL 22999551, at *4 (D. Min. Dec. 19, 2003) (stating that “[t]o establish invalidity on obviousness

grounds, the moving party must show by clear and convincing evidence that all claim limitations are present in a combination of prior art references,” citing *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001)). “Knowledge of a POSA” or “common sense” can be used to “fill in” for a limitation missing in a reference or combination of references. However, additional showings beyond the bare allegation must be made. *Arendi v. Apple, Inc.*, 832 F. 3d 1355, 1363 (Fed. Cir. 2016); *DSS Technology Mgmt., Inc. v. Apple Inc.*, 885 F.3d 1367, 1374 (Fed. Cir. 2018) (emphasis added).

As the Federal Circuit has noted:

Only after considering **all** Graham factors are the “motivation to combine” and “reasonable expectation of success” considered in order to protect against hindsight bias in reaching the ultimate legal question as to whether the invention would have been obvious. A determination of whether a claim is invalid as obvious under § 103 requires consideration of all four Graham factors, and it is error to reach a conclusion of obviousness **until** all those factors are considered.

Apple Inc. v. Samsung Elecs. Co., Ltd., 839 F.3d 1034, 1048 (Fed. Cir. 2016) (emphasis added).

Without the context provided by the identification of the differences, the discussion of motivation to combine makes little sense. After all, the purpose of the *Graham* factors, including the second "differences" factor, is to guard against hindsight bias in reaching the ultimate legal conclusion of obviousness. *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litigation*, 676 F.3d 1063, 1079 (Fed. Cir. 2012). Only after identifying the differences should the two factual inquiries – motivation to combine and reasonable likelihood of success— be evaluated. *Apple*, 839 F.3d at 1048.

The M.P.E.P. correctly summarizes Federal Circuit precedent as follows:

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir.

1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983)

....

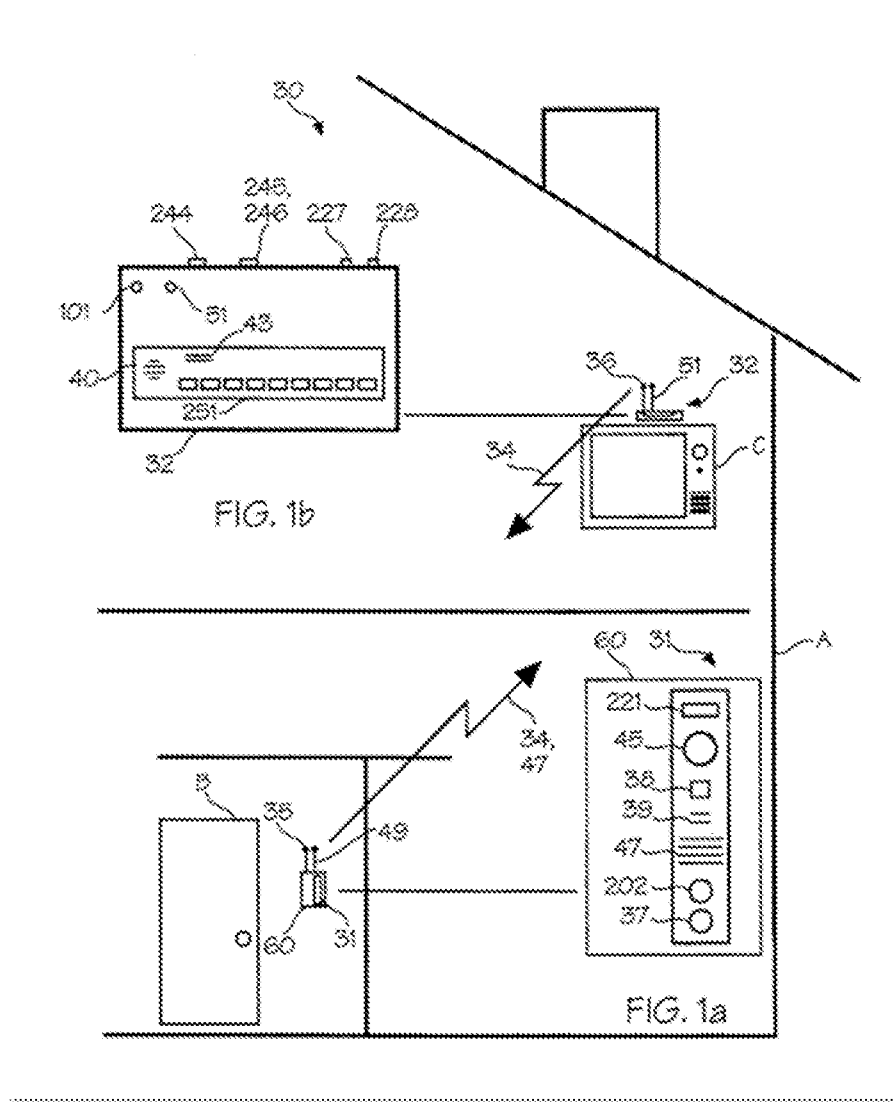
M.P.E.P., Ninth Edition, Rev. 07.2022, Pbl. Feb 2023, Section 2141.02 (emphasis added).

B. Scope and Content of Prior Art

The Examiners ordered reexamination based on three prior art references: (1) Von Bauer, (2) Menard, and (3) Klein. The Patent Owner provided a brief description of each in the Corrected Request for Reexamination. *See* Section V, p. 3. The following are more detailed descriptions of each.

1. Von Bauer

Von Bauer is titled “Video Doorbell System” and issued on June 27, 1995. As shown in Fig. 1 shown below, Von Bauer’s system has two primary components: (1) the doorbell station (31) located near the entranceway (B) to a building (A); and (2) the Video Receiver Station (32) located within the building (A), typically near a TV monitor (C):



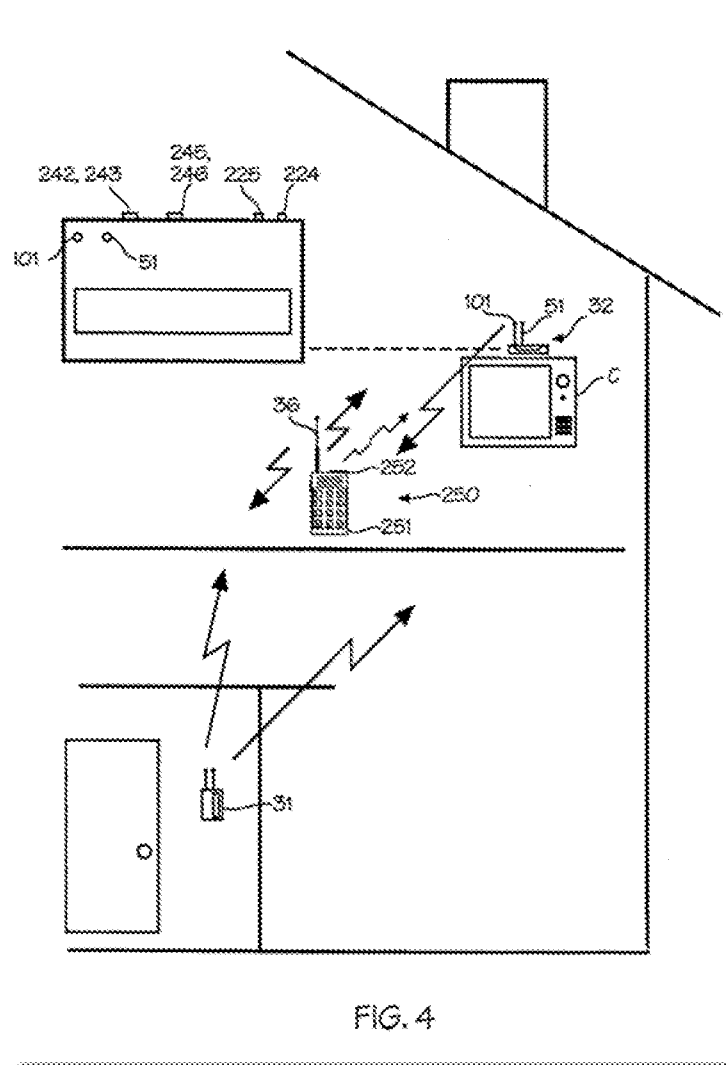
Von Bauer at Fig. 1a

Von Bauer, Fig. 1, *see also* Col. 6, ll.

Von Bauer's system is designed to work with a user's existing TV monitor, marked C above. The Video Receiver Station connects to the TV monitor to allow a user to view images of objects viewed by the camera and to permit "normal viewing operations" such as "a normal broadcast or cable program" otherwise.

In an alternate embodiment, a hand-held wireless controller and voice communicator (250) and a relay station (mistakenly denoted by 32 below but not specifically numbered in the patent) can be used in place of the Video Receiver Station. Von Bauer, 14:59-15:14 ("FIG. 14 is

a schematic diagram of a wireless controller and voice communicator useable in place of Video Receiver Station 32 shown in FIGS. 12 and 13”). Wireless controller and voice communicator 250 comprises a self-contained, battery powered, hand-held apparatus that performs most of the functions of the Video Receiver Station depicted in FIGS. 12 and 13 and described above. FIG. 15 shows a relay station which is used in conjunction with the apparatus 250 of FIG. 14.”).



Von Bauer at Fig. 4

The hand-held wireless controller and voice communicator 250 does not receive video and audio signals from the doorbell station 31. Those are received by the relay device (including antenna 51 coupled to a video receiver 50), which is a separate device that is used in conjunction

the hand-held wireless controller and voice communicator 250. Von Bauer at 14:59-15:14 (“FIG. 15 shows a relay station which is used in conjunction with the apparatus 250 of FIG. 14. . . when using hand-held communicator 250, a video receiver 50 (FIG. 15) may be connected to a video modulator that produces an RF output signal on an unused channel (Channel 3 or Channel 4), the output of which is connected to antenna input multiplier of a television monitor. Thus, if the monitor is commanded to receive Channel 3, for example, a normal broadcast or cable program will be interrupted and replaced by the video signal received from a Video Doorbell Station 31 by video receiver 50.”); *see also* 15:15-25; *compare* Figs. 12 and 13 *with* Figs. 14 and 15. This is also clear from Fig. 4 above, where the hand-held wireless controller and voice communicator 250 includes antenna 36 for receiving audio signals from the Doorbell System but the relay station that includes antenna 51 for receiving video signals is a separate device that is connected to the TV monitor C. The hand-held wireless controller

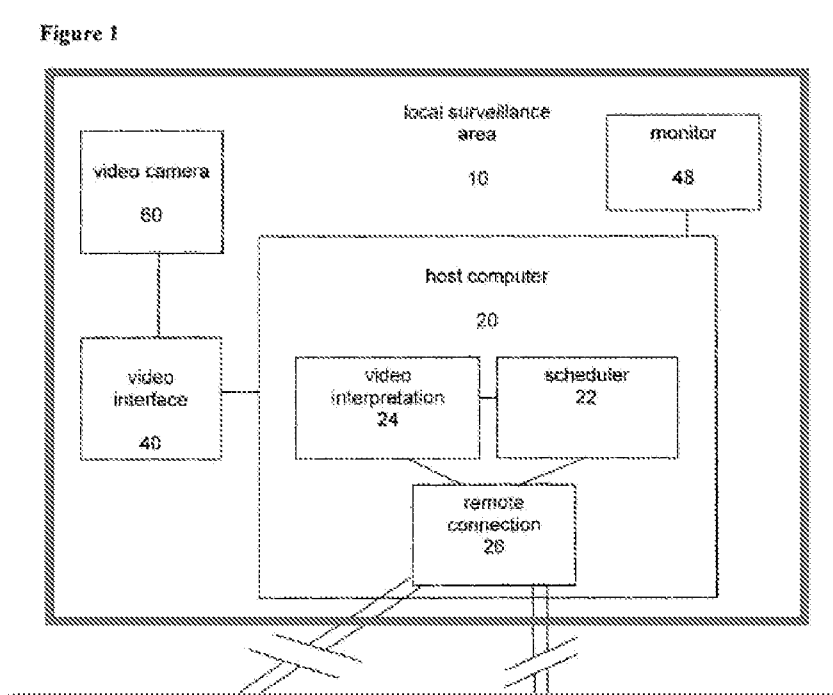
2. Menard

Menard is an omnibus reference that has 25+ embodiments directed to “detecting and monitoring at least one event or condition of interest” that describes everything from a coffee maker to an alarm clock. *See, e.g.*, Menard, pp. 23:25-24:14. Menard at most has three embodiments related to doorbells or an interior camera and refers to these embodiments as “module 200D” and “module 200E,” shown in Figures 7-10. *Id.*, Figs. 7-10. These figures do not contain information beyond showing elements such as intercoms and deadbolts that may be located at a front door. *Id.* Module 200 is generic, and Menard labels various elements with a “200XX” labeling system such as, for example, 200F is an alarm clock, 200G is a coffee maker, 200H is a television, 200J is an air conditioner, 200K is a furnace, 200M is a glass break sensor, 200U is a siren, 200AA is a thermometer. The only embodiments in Menard that relate to

doorbells in the written description are discussed generally at Pages 19:30–22:29 in the written description. Menard, pp.19-22. Figure 7 shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A. Menard, Fig. 7; p. 20, ll. 2 – 4. Menard provides no enablement for its various embodiments, instead focusing on the general concept of remote monitoring without attention to the details of the specific hardware needed to implement.

3. Klein

Klein is directed to “security or surveillance systems employed *in* homes and businesses.” Klein, [0002]-[0006] (emphasis added). To that end, Klein discloses a “local surveillance area 10” that includes “video camera 60,” “video interface 40,” monitor 48,” and “host computer 20,” among other components, which are all inside the “local surveillance area 10,” as shown in Fig. 1. Klein, Fig. 1 (annotation added):



See also Klein, [0016]-[0017] (“Referring to FIG. 1, the video surveillance system of the present

invention comprises a local video surveillance connection and an optional remote video surveillance connection. The local video surveillance connection is located in the local surveillance area 10, which includes the specific area intended to be kept under surveillance. A video camera 60 is mounted in a position in the local surveillance area 10 in the desired viewing location.”); *see also* Klein, [0021]. The “local surveillance area 10” is not at the “exterior.” For example, as Klein discloses, “[t]he user may then adjust the camera 60 viewing angle to *include areas of interest for monitoring, such as a cash register or an entry door.*” Klein, [0038] (emphasis added). As Klein goes on to explain, “motion detection at an entry door” detects “normal after-hours entry” and “entries outside the normal ours.” *Id.* at [0042]. Thus, Klein discloses a system that detects motion after an intruder has entered and does not teach a “doorbell monitoring system” as claimed.

C. Pending Claims are Non-obvious in view of SNQ1 and SNQ2

Below, differences are identified as between the inventions of the Pending Claims and the references cited in SNQ 1 and SNQ 2. However, it should be understood that the differences identified below are not exclusive to others and that Patent Owner reserves the right to make additional distinctions if needed. For at least the following reasons, the Pending Claims should be found to be patentable.

1. Invention of Independent Pending Claim 1 as Amended

Claim 1 is directed to a “doorbell monitoring system” having a “doorbell.” The Examiners found “a substantial new question of patentability” as to Claim 1 in view of Von Bauer in combination with Menard. Order, p. 5.

As correctly noted by Examiners, Von Bauer does not disclose “cellular audio communications.” Order, p. 4. To provide this missing teaching, the Examiners cited Menard.

As an initial matter, Menard does not disclose a doorbell monitoring system but rather a surveillance system. Furthermore, the limitation in original Claim 1 and in Amended Claim 1 shown above regarding “cellular audio communications” contains additional limitations that are not met by Menard: “a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the *cellular audio communications* to the control unit, and rendering the at least one portion of entry point communications received from the control unit.” While Menard shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A, it does not show cellular communications “to the control unit.”¹ Menard, p. 20 Fig. 7; p. 20, ll. 2 – 4. Therefore, Claim 1 as originally issued is not obvious in view of the combination of Von Bauer and Menard because, among other reasons, the combination lacks this crucial “to the control unit” limitation. Furthermore, Patent Owner asserts that there would have been no motivation to combine the two references.

Nevertheless, in order to move this proceeding to conclusion, Claim 1 has been amended to add yet additional limitations that are also missing from the combination of Von Bauer and Menard. Those limitations are as follows.

The limitation “the control unit comprising ... alarm system interface... and a video monitor” is not shown in Von Bauer. Menard also does not teach a video monitor nor a “microcontroller” (as also required). Thus, Claim 1 (Amended) is non-obvious in view of the combination for at least this additional reason.

¹ Patent Owner notes that there is an embodiment wherein the cellular telephone communicates with the exterior module via LD communication module 250. Menard pp. 16, 21; Fig. 3A. However, Menard does not make clear the full functionality of that module. What is clear is that LD communication module 250 does not meet the definition of a “control unit” and is therefore not a control unit as contemplated by the Pending Claims in this Amendment and Response.

Neither Von Bauer nor Menard teach playing a “pre-recorded message.” Thus, Claim 1 (Amended) is non-obvious in view of the combination for at least this additional reason.

As noted above, neither Von Bauer nor Menard teach a “control unit” that communicates with a cellular phone. To further emphasize that this functionality is required,² Patent Owner has amended Claim 1 to include: “wherein the control unit is capable of receiving audio communications from the cellular telephone.” As already noted, neither Von Bauer nor Menard disclose this. Von Bauer does not disclose a cellular phone, and the “exterior module” of Menard directly communicates with a cellular phone and not a “control unit” as required. Thus, Claim 1 (Amended) is non-obvious in view of the combination for at least this additional reason.

Having reviewed the differences, one must review the motivation to combine and the reasonable likelihood of success. As an initial matter, a POSA would not have been motivated to combine the analog doorbell monitoring system of Von Bauer with the system of Menard. The system of Von Bauer utilized an analog “composite video signal” sent by an FM transmitter. Von Bauer, Col. 7, ll. 25 – 33. Menard utilized digital communications. *See* Menard, p. 20, l. 13 – 20. Even assuming a motivation, extensive modifications to the “Video Receiver Station” of Von Bauer to allow communications with the cell phone shown in Menard. Therefore, in view of the missing limitations shown above and/or the lack of motivation to combine or likelihood of success, and viewing Claim 1 as a whole, a POSA would not find the invention of Claim 1 as issued much less Claim 1 (Amended) obvious.

2. Invention of Independent Claim 8 as Amended

Claim 8 is directed to a “a method for providing doorbell monitoring.” The Examiners

² The Menard embodiment described in fn. 1 has no relevance to this analysis because neither that embodiment nor any other in Menard teach a control unit as contemplated by these amended claims.

found “a substantial new question of patentability” as to Claim 8 in view of Von Bauer in combination with Menard and Klein. Order, p. 5.

As correctly noted by Examiners, Von Bauer does not disclose “cellular audio communications.” Order, p. 6. To provide this missing teaching, the Examiners cited Menard. As an initial matter, Menard does not disclose a doorbell monitoring system but rather a surveillance system.

Nevertheless, Claim 8 has been amended to add yet additional limitations that are also missing from the combination of Von Bauer, Menard, and Klein. Those limitations are as follows.

None of these references teach “wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit.” As explained above, the communications in Menard are sent to the cellular phone directly by the exterior module 220A. *See* fn. 2. For the reason that Menard does not teach a “control unit” that relays information between the exterior module and cellular phone, Menard does not teach “receiving at the control unit a request to send additional information regarding an event associated with the doorbell.” Also, Klein does not disclose this limitation.

None of Von Bauer, Menard, or Klein teach “notifying a home security company when an emergency event occurs at the entry point.”

None of Von Bauer, Menard, or Klein teach “sending video communications before the proximity detector is actuated.”

None of Von Bauer, Menard, or Klein teach “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone.”

Having reviewed the differences, one must review the motivation to combine and the reasonable likelihood of success. As an initial matter, a POSA would not have been motivated to combine the analog doorbell monitoring system of Von Bauer with the system of Menard or the “Digital Video Security System” of Klein. The system of Von Bauer utilized an analog “composite video signal” sent by an FM transmitter. Von Bauer, Col. 7, ll. 25 – 33. Menard utilized digital communications. *See* Menard, p. 20, l. 13 – 20. Even assuming a motivation, extensive modifications to the “Video Receiver Station” of Von Bauer to allow digital communications with the cell phone shown in Menard. Therefore, in view of the missing limitations shown above and/or the lack of motivation to combine or likelihood of success, and viewing Claim 8 as a whole, a POSA would not find the invention Claim 8 (Amended) obvious.

3. Invention of Independent Pending Claim 19

Claim 19 is directed to a “system for providing doorbell monitoring.” The Examiners found “a substantial new question of patentability” as to Claim 1 in view of Von Bauer in combination with Menard. Order, p. 5. For reasons explained below, Claim 19 is patentable over the combination of Von Bauer and Menard.

As correctly noted by Examiners, Von Bauer does not disclose “cellular audio communications.” Order, p. 4. To provide this missing teaching, the Examiners cited Menard. As an initial matter, Menard does not disclose a doorbell monitoring system but rather a surveillance system. Furthermore, there are several limitations in original Claim 19 regarding “cellular audio communications” that are not met by Menard, including at least: (1) “a control unit ... for communicating the received cellular audio communications to the external speaker” and (2) “a cellular telephone ... transmitting the cellular audio communications to the control unit.” As explained above, Menard does not disclose a cellular phone that communicates with a

control unit. Menard, p. 20 Fig. 7; p. 20, ll. 2 – 4. While Menard shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A, it does not show cellular communications “to the control unit.” Menard, p. 20; Fig. 7; p. 20, ll. 2 – 4.

In addition, there is no disclosure in Von Bauer or Menard of “a cellular telephone ... rendering the at least one portion of doorway communications received *from the control unit*” ‘191 Patent, Claim 19, ll. 57 – 61. As already noted, Menard does not show a “control unit” communicating with a cellular phone.

Therefore, Claim 19 as originally issued is not obvious in view of the combination of Von Bauer and Menard because, among other reasons, the combination lacks the limitations noted above.

Having reviewed the differences, one must review the motivation to combine and the reasonable likelihood of success. As an initial matter, a POSA would not have been motivated to combine the analog doorbell monitoring system of Von Bauer with the system of Menard. The system of Von Bauer utilized an analog “composite video signal” sent by an FM transmitter. Von Bauer, Col. 7, ll. 25 – 33. Menard utilized digital communications. *See* Menard, p. 20, l. 13 – 20. Even assuming a motivation, extensive modifications to the “Video Receiver Station” of Von Bauer to allow communications with the cell phone shown in Menard. Therefore, in view of the missing limitations shown above and/or the lack of motivation to combine or likelihood of success, and viewing Claim 19 as a whole, a POSA would not find the invention of Claim 19 as issued) obvious.

4. New Dependent Claim 21 is non-obvious

Dependent Claim 21 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 21 is also non-obvious. Claim 21 also patentable for at least the

additional reason that neither Von Bauer nor Menard disclose the limitation “wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data *to the control unit*.”

5. New Dependent Claims 22 – 23

Dependent Claims 22 depends from Claim 1. Claim 23 depends from Claim 22. Because Claim 1 is non-obvious for the reasons explained above, Claims 22 – 23 are also non-obvious.

6. New Dependent Claim 24

Dependent Claim 24 depends from Claim 22. Because Claim 22 is non-obvious for the reasons explained above, Claim 21 is also non-obvious. Claim 24 is also patentable for at least the additional reasons that neither Von Bauer nor Menard disclose the limitations: “wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event; wherein the doorbell is capable of recording visual and audio communications *before any type of triggering event*; wherein the doorbell is also capable of *wirelessly streaming video communications* after detection by the proximity detector;” and “wherein the doorbell monitoring system comprises *an alarm system interface*; and wherein the doorbell monitoring *system employs one or more offsite servers* to facilitate communications between the cellular telephone, *the control unit*, and the single communications unit after a triggering event.” Hence, Claim 24 is non-obvious for the additional reason that these limitations are missing from the combination.

7. New Dependent Claims 25 and 26

Dependent Claim 25 depends from Claim 1. Claim 26 depends on Claim 25. Because

Claim 1 is non-obvious for the reasons explained above, Claims 25 and 26 are also non-obvious.

8. New Dependent Claim 27

Claim 27 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 27 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitations: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 27 is non-obvious.

9. New Dependent Claim 28

Claim 28 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 28 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitations: [1] wherein the doorbell monitoring system is capable of authenticating a user of the system; [2] wherein the doorbell is capable of recording video and audio before any type of triggering event; [3] wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; [4] wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit. Therefore, Claim 28 is non-obvious in view of these limitations that are missing from Von Bauer and Menard.

10. New Dependent Claim 29

Claim 29 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 29 is also non-obvious. In addition, neither Von Bauer or Menard

teaches the following limitation: “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 29 is non-obvious in view of these limitations that are missing from Von Bauer and Menard.

11. New Dependent Claim 30

Claim 30 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 30 is also non-obvious. Therefore, Claim 30 is non-obvious in view of this additional limitations that is missing from Von Bauer and Menard.

11. New Dependent Claim 31

Claim 31 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 31 is also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitation: “wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.” Therefore, Claim 31 is non-obvious in view of this additional limitation that is missing from Von Bauer and Menard.

12. New Dependent Claim 32

Claim 32 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 32 is also non-obvious.

13. New Dependent Claim 33

Claim 33 depends from Claim 32. Because Claims 1 and 32 are non-obvious for the reasons explained above, Claim 33 is also non-obvious.

14. New Dependent Claim 34

Claim 34 depends from Claim 1. Because Claim 1 is non-obvious for the reasons

explained above, Claim 34 is also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitation: “wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.” Therefore, Claim 34 is non-obvious in view of this additional limitation that is missing from Von Bauer and Menard.

15. New Dependent Claims 35 – 37 (Regarding Storage)

Claims 35 – 37 depend from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claims 35 - 37 are also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitations: (Claim 35) “wherein the stored video and audio communications are accessible by an additional device apart from the control unit;” (Claim 36) “wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime;” (Claim 37) “wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.” Therefore, each of Claims 35 - 37 is non-obvious in view of the additional limitation that is missing from Von Bauer and Menard.

16. New Independent Claim 38

New Independent Claim 38 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 38. In addition, Claim 38 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard.

Neither Von Bauer nor Menard discloses a control unit (as earlier claimed) “comprising a control panel, an alarm system interface, a microcontroller, and a video monitor

communicatively coupled to the microcontroller.” In addition, Neither Von Bauer nor Menard disclose at least the following additional limitations: [1] “wherein the entry point visual and audio communications are wirelessly streamed to the control unit;” [2] “wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor;” [3] “wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit; [4] “wherein the control panel is capable of allowing an individual to manage a security system; wherein the alarm system interface of the control panel is capable of interfacing with the security system;” [5] “wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed;” and [6] “wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.” Therefore, Claim 38 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

18. New Dependent Claim 39

Claim 39 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 39 is also non-obvious.

17. New Dependent Claim 40

Claim 40 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 40 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitation: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point.” Therefore, Claim 40 is non-obvious in view of this additional limitation that is missing from Von Bauer and Menard.

18. New Dependent Claims 41 – 44

Each of Claim 41 - 42 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, each of these Claims is also non-obvious. Claim 43 depends from Claim 42. Because Claim 42 is non-obvious for the reasons explained above, Claim 43 is also non-obvious.

In addition, Claims 44 depends from Claim 42. Because Claim 42 is non-obvious for the reasons explained above, Claim 44 is also non-obvious. Furthermore, neither Von Bauer or Menard teaches the limitations: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;” “wherein the doorbell monitoring system comprises an alarm system interface; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.”

Therefore, Claims 41 – 44 are non-obvious in view of these additional limitations that are missing from Von Bauer and Menard.

19. New Dependent Claim 45

Claim 45 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 45 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitations: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 45 is non-obvious in view of these additional limitations that are missing from Von Bauer and Menard.

20. New Dependent Claim 46

Claim 46 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 46 is also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitations: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 46 is non-obvious in view of these additional limitations that are missing from Von Bauer and Menard.

20. New Dependent Claims 47 – 48

Each of Claims 47 – 48 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claims 47 - 48 are each also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitations recited by these claims. Therefore, each of Claims 47 and 48 is non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

21. New Dependent Claim 49

Claims 49 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claims 49 is also non-obvious.

22 New Dependent Claim 50

Claims 50 depends from Claim 49. Because Claim 49 is non-obvious for the reasons

explained above, Claims 50 is also non-obvious.

23. New Dependent Claims 51 – 54 (Re. Storage)

Claims 51 – 54 each depend from claim 38. Because Claim 38 is non-obvious for the reasons explained above, each of Claims 51 – 54 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitations recited by these claims. Therefore, each of Claims 51 – 54 is non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

24. New Independent Claim 55

New Independent Claim 55 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 55. In addition, Claim 55 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: [1] “wherein the entry point visual and audio communications are wirelessly streamed to the control unit;” [2] “wherein the control unit is capable of storing the entry point visual and audio communications captured by the communications unit in a data storage unit of the control unit;” [3] “wherein the control panel is capable of allowing an individual to manage a security system;” [4] “wherein an alarm system interface of the control panel is capable of interfacing with the security system;” [5] “wherein the control unit is capable of receiving the entry point visual and audio communications captured by the communications unit before actuation of the proximity detector located in the doorway or if the doorbell is pressed;” and [6] “wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.” Therefore, Claim 55 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

25. New Dependent Claims 56 – 58

Claims 56 – 58 each depend from claim 55. Because Claim 55 is non-obvious for the reasons explained above, each of Claims 56 – 58 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitation recited by Claim 57. Therefore, Claims 57 is also non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

26. New Dependent Claim 59

Claims 59 depends from Claim 58. Because Claim 58 is non-obvious for the reasons explained above, Claims 59 is also non-obvious.

27. New Dependent Claim 60

Claims 60 depends from Claim 58. Because Claim 58 is non-obvious for the reasons explained above, Claims 60 is also non-obvious. In addition, Claim 60 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event,” “wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.” Therefore, Claim 60 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

28. New Dependent Claims 61 - 62

Claim 61 depends from Claim 55. Claim 62 depends from Claim 61. Because Claim 55 is non-obvious for the reasons explained above, Claims 61 and 62 are also non-obvious.

29. New Dependent Claim 63

Claim 63 depends from Claim 55. Because Claim 55 is non-obvious for the reasons explained above, Claim 63 is also non-obvious. In addition, Claim 63 includes at least the

following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 63 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

30. New Dependent Claim 64

Claim 64 depends from Claim 55. Because Claim 55 is non-obvious for the reasons explained above, Claim 64 is also non-obvious. In addition, Claim 64 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 64 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

31. New Dependent Claims 65 - 68

Claims 65 – 67 each depends from Claim 55. Claim 68 depends from Claim 67. Because Claim 55 is non-obvious for the reasons explained above, Claims 65 – 68 are also non-obvious.

In addition, Claim 65 – 66 each add a limitation that is not found in the combination of

Von Bauer and Menard. Therefore, each of Claims 65 – 66 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

32. New Dependent Claims 69 – 72 (Re. Storage)

Each of Claims 69 – 72 each depends from Claim 55. Because Claim 55 is non-obvious for the reasons explained above, Claims 69 - 72 are also non-obvious. In addition, Claim 69 - 72 each add a limitation that is not found in the combination of Von Bauer and Menard. Therefore, each of Claims 69 – 72 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

33. New Independent Claim 73

New Independent Claim 73 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 73.

In addition, Claim 73 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: [1] the control unit comprising a control panel, an alarm system interface, a microcontroller, data storage unit and a video monitor communicatively coupled to the microcontroller; [2] wherein the entry point visual and audio communications are wirelessly streamed to the control unit; [3] wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit; [4] wherein the alarm system interface of the control panel is capable of interfacing with a security system; [5] wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed; and [6] wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system. Therefore,

Claim 73 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

34. New Dependent Claims 74 – 77

Each of Claims 74 - 77 depend from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claims 74 - 77 are also non-obvious.

In addition, Claim 74 each add a limitation that is not found in the combination of Von Bauer and Menard. Claims 74 adds “wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and *wirelessly stream* the captured entry point visual and audio communications data to the control unit.” Claim 75 adds “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point.” Claim 76 adds “wherein the single communications unit is *configured to stream* at least a portion of the *captured* visual and audio communications data.” Therefore, each of Claims 74 - 77 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

35. New Dependent Claims 78 – 79

Each of Claims 78 - 79 each depends from Claim 77. Because Claim 77 is non-obvious for the reasons explained above, Claims 78 – 79 are also non-obvious.

In addition, Claim 79 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;” “wherein the doorbell monitoring system comprises an alarm system interface; wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.” Therefore, Claim 79 is non-

obvious in view of the additional limitations that are missing from Von Bauer and Menard.

36. New Dependent Claim 80

Claim 80 depends from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claim 80 is also non-obvious.

In addition, Claim 80 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 80 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

37. New Dependent Claim 81

Claim 81 depends from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claim 81 is also non-obvious.

In addition, Claim 81 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 81 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

38. New Dependent Claims 82 – 83

Each of Claims 82 - 83 each depends from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claims 82 - 83 are also non-obvious. In addition, Claim 82 – 83 each add a limitation that is not found in the combination of Von Bauer and Menard. Therefore, each of Claims 82 – 83 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

39. New Independent Claims 84 – 85

Each of Claim 84 depends from Claim 73 and Claim 85 depends from Claim 84. Because Claim 73 is non-obvious for the reasons explained above, Claims 84 - 85 are also non-obvious.

40. New Dependent Claims 86 – 89 (Re. Storage)

Claims 86 - 89 each depend from claim 73. Because Claim 73 is non-obvious for the reasons explained above, each of Claims 86 – 89 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitations recited by these claims. Therefore, each of Claims 86 – 89 is non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

41. New Dependent Claim 90

New Independent Claim 90 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 90.

In addition, Claim 90 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;” and

“wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed.” Therefore, Claim 90 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

42. New Dependent Claim 91

Claim 91 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 91 is also non-obvious.

43. New Dependent Claim 92

Claim 92 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 92 is also non-obvious.

In addition, Claim 92 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data.” Therefore, Claim 92 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

43. New Dependent Claims 93 - 94

Claim 93 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 93 is also non-obvious. Claim 94 depends from Claim 93. Because Claim 90 is non-obvious for the reasons explained above, Claims 94 is also non-obvious.

44. New Dependent Claim 95

Claim 95 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 95 is also non-obvious.

In addition, Claim 95 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell is capable of recording visual and audio

communications before any type of triggering event; wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector; wherein the doorbell monitoring system comprises an alarm system interface; wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.” Therefore, Claim 95 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

45. New Dependent Claims 96 - 97

Claims 96 depends from Claim 90. Claim 97 depends from Claim 96. Because Claim 90 is non-obvious for the reasons explained above, Claims 96 and 97 are also non-obvious.

46. New Dependent Claim 98

Claim 98 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 98 is also non-obvious.

In addition, Claim 98 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 98 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

47. New Dependent Claim 99

Claim 99 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 99 is also non-obvious.

In addition, Claim 99 adds the following limitations that are not found in the combination

of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone;” and “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 99 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

48. New Dependent Claim 100

Claim 100 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 100 is also non-obvious.

In addition, Claim 100 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 100 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

48. New Dependent Claim 101

Claim 101 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 101 is also non-obvious.

In addition, Claim 101 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at

least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.” Therefore, Claim 100 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

49. New Dependent Claim 102

Claim 102 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 102 is also non-obvious.

In addition, Claim 102 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.” Therefore, Claim 102 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

49. New Dependent Claims 103 and 104

Claim 103 depends from Claim 90. Claim 104 depends from Claim 103. Because Claim 90 is non-obvious for the reasons explained above, Claims 103 and 104 are also non-obvious.

50. New Claims 105 – 108 (Re. Storage)

Each of Claims 105 - 108 each depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 105 - 108 are also non-obvious. In addition, Claim 105 – 108 each add a limitation that is not found in the combination of Von Bauer and Menard. Therefore, each of Claims 105 – 108 are non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

51. New Dependent Claim 109

Claim 109 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 109 is also non-obvious.

52. New Dependent Claim 110

Claim 110 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claims 110 is also non-obvious.

53. New Dependent Claim 111

Claim 111 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claims 111 is also non-obvious. In addition, Claim 111 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit *comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.*” (emphasis added). Therefore, Claim 111 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

54. New Dependent Claim 112

Claim 112 depends from Claim 111. Because Claim 111 is non-obvious for the reasons explained above, Claims 112 is also non-obvious. In addition, Claim 112 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: recording video after the proximity detector is triggered and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” Therefore, Claim 112 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

55. New Dependent Claim 113

Claim 113 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 113 is also non-obvious. In addition, Claim 113 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 113 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

56. New Dependent Claim 114

Claim 114 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 114 is also non-obvious. In addition, Claim 114 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.” Therefore, Claim 114 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

57. New Dependent Claim 115

Claim 115 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 115 is also non-obvious. In addition, Claim 115 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: providing an interface that provides an option to notify an alarm company.” Therefore, Claim 115 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

58. New Independent Claim 116

New Independent Claim 116 is a method claim wherein the first seven limitations are the

original limitations found in Claim 8 as issued. As explained above, original Claim 8 is patentable over the combination of Von Bauer, Menard, and Klein. Therefore, so is Claim 116. In addition, Claim 116 includes at least the following additional limitations that are not found in the combination of Von Bauer, Menard, and Klein.

Neither Von Bauer, Menard, nor Klein disclose: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;” “receiving at a control unit a request to send additional information regarding an event associated with the doorbell;” “wirelessly streaming video communications from the single communications unit before the proximity detector is actuated;” and “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone.”

Therefore, Claim 116 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

59. New Dependent Claim 117

Claim 117 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 117 is also non-obvious. In addition, Claim 117 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “rendering a menu option that when selected would take no action based upon an actuation of a security system.” Therefore, Claim 117 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

60. New Dependent Claim 118

Claim 118 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 118 is also non-obvious.

59. New Dependent Claim 119

Claim 119 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 119 is also non-obvious. In addition, Claim 119 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 119 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

60. New Dependent Claim 120

Claim 120 depends from Claim 119. Because Claim 119 is non-obvious for the reasons explained above, Claim 120 is also non-obvious. In addition, Claim 120 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “recording video after the proximity detector is triggered; sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” Therefore, Claim 120 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

61. New Dependent Claim 121

Claim 121 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 121 is also non-obvious. In addition, Claim 121 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 121 is non-obvious in view

of the additional limitations that are missing from Von Bauer, Menard, and Klein.

62. New Dependent Claim 122

Claim 122 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 122 is also non-obvious.

63. New Dependent Claim 123

Claim 123 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 123 is also non-obvious. In addition, Claim 123 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “providing an interface that provides an option to notify an alarm company.” Therefore, Claim 123 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

64. New Independent Claim 124

New Independent Claim 124 is a method claim wherein the first seven limitations are the original limitations found in Claim 8 as issued. As explained above, Claim 8 is patentable over the combination of Von Bauer, Menard, and Klein. Therefore, so is Claim 124.

In addition, Claim 124 includes at least the following additional limitations that are not found in the combination of Von Bauer, Menard, and Klein. Neither Von Bauer, Menard, nor Klein disclose: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;” “sending from a control unit additional information regarding an event associated with the doorbell;” “notifying a home security company when an emergency event occurs at the entry point;” “wirelessly streaming video communications before the proximity detector is actuated;” and “wirelessly streaming video communications after the proximity detector is actuated.”

Therefore, Claim 124 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

65. New Dependent Claim 125

Claim 125 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 125 is also non-obvious. In addition, Claim 125 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “rendering a menu option that when selected would take no action based upon an actuation of a security system.” Therefore, Claim 125 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

66. New Dependent Claim 126

Claim 126 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claims 126 is also non-obvious.

67. New Dependent Claim 127

Claim 127 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claims 127 is also non-obvious. In addition, Claim 127 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 127 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

68. New Dependent Claim 128

Claim 128 depends from Claim 127. Because Claim 127 is non-obvious for the reasons explained above, Claim 128 is also non-obvious. In addition, Claim 128 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” Therefore, Claim 128 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

69. New Dependent Claim 129

Claim 129 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 129 is also non-obvious. In addition, Claim 129 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 129 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

70. New Dependent Claim 130

Claim 130 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 130 is also non-obvious.

71. New Dependent Claim 131

Claim 131 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 131 is also non-obvious. In addition, Claim 131 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “providing an interface that provides an option to notify an alarm company.” Therefore, Claim 131 is non-

obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

E. Motivation to Combine

There is no need to discuss motivation to combine the references of the combination when together they do not meet all claim limitations. *See generally Rhine v. Casio, Inc.*, 183 F.3d 1342, 1346 (Fed. Cir. 1999) (remanding for further fact-finding including motivation to combine even though court found all limitations present in combination). Because limitations of the Pending Claims are missing from the combinations of SNQ 1 and 2, there is no need to discuss the motivation to combine. Nevertheless, Patent Owner disputes that a person of ordinary skill in the art (“POSA”) would have been motivated to combine either (1) Von Bauer and Menard or (2) Von Bauer, Menard, and Klein.

In light of the amendments herein and the explanations set forth above, Patent Owner requests that the Pending Claims be allowed. To the extent that the Pending Claims are not considered to be in condition for allowance, Patent Owner hereby requests an interview regarding the Pending Claims in order to expedite allowance of same. Patent Owner respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at kirby@kirbydrakelaw.com.

Respectfully submitted,

Date: November 11, 2024

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AMENDMENTS TO THE CLAIMS

1. (Amended) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker; [and]

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit[.]; and

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications; and

wherein the control unit is capable of receiving audio communications from the cellular telephone.

8. (Amended) A method for providing doorbell monitoring, the method comprising:

- ringing of a doorbell at an entry point;
- responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;
- relaying at least a portion of the captured visual and audio communications to a cellular phone;
- rendering the least a portion of the captured visual and audio communications at the cellular phone;
- capturing audio communications at the cellular phone;
- relaying the audio communications from the cellular phone to the entry point; [and]
- rendering the audio communications at the entry point[.] via a communications unit;
- wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit;
- sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera;
- receiving at the control unit a request to send additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point;
sending video communications before the proximity detector is actuated; and
authenticating a homeowner before rendering at least a portion of the captured visual and
audio communications at the cellular phone;

wherein the doorbell is part of the single communications unit which also comprises the
camera, the proximity detector, a microphone, and a speaker.

14. (Canceled).

21. (New) The doorbell monitoring system of claim 1,
wherein the proximity detector detects a person proximate to the entry point;
wherein the detection by the proximity detector of the person proximate to the entry point
provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second
triggering event, capture entry point visual and audio communications at the entry point and
wirelessly stream the captured entry point visual and audio communications data to the control
unit.

22. (New) The doorbell monitoring system of claim 1, wherein the single
communications unit is configured to capture additional video from the video camera after the
triggering event.

23. (New) The doorbell monitoring system of claim 22, wherein the single
communications unit is configured to capture additional video from the video camera after a
second triggering event.

24. (New) The doorbell monitoring system of claim 22,
wherein the single communications unit is configured to capture additional video from

the video camera after a second triggering event;

wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

25. (New) The doorbell monitoring system of claim 1, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

26. (New) The doorbell monitoring system of claim 25, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

27. (New) The doorbell monitoring system of claim 1,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;
and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

28. (New) The doorbell monitoring system of claim 1,

wherein the control unit is capable of displaying the entry point visual and audio

communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

29. (New) The doorbell monitoring system of claim 1, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

30. (New) The doorbell monitoring system of claim 1, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

31. (New) The doorbell monitoring system of claim 1, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

32. (New) The doorbell monitoring system of claim 1, wherein the cellular telephone

comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

33. (New) The doorbell monitoring system of claim 32, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

34. (New) The doorbell monitoring system of claim 1, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

35. (New) The doorbell monitoring system of claim 1, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

36. (New) The system of claim 34, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

37. (New) The system of claim 34, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

38. (New) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry way, the activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry way, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio

communications at the entry way and transmitting the captured visual and audio

communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor;

wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit;

wherein the control panel is capable of allowing an individual to manage a security

system;

wherein the alarm system interface of the control panel is capable of interfacing with the security system;

wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime;

wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed; and

wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.

39. (New) The doorbell monitoring system of claim 38,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

40. (New) The doorbell monitoring system of claim 38, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before the proximity detector is triggered or the doorbell is triggered.

41. (New) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio

communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

42. (New) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

43. (New) The doorbell monitoring system of claim 42, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

44. (New) The doorbell monitoring system of claim 42, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;

wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

45. (New) The doorbell monitoring system of claim 38,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

46. (New) The doorbell monitoring system of claim 38,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

47. (New) The doorbell monitoring system of claim 44, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

48. (New) The doorbell monitoring system of claim 38, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio

communications captured by the communications unit.

49. (New) The doorbell monitoring system of claim 38, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

50. (New) The doorbell monitoring system of claim 49, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

51. (New) The doorbell monitoring system of claim 38, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

52. (New) The doorbell monitoring system of claim 38, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

53. (New) The system of claim 51, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

54. (New) The system of claim 51, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

55. (New) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry way, the video camera

and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is capable of storing the entry point visual and audio communications captured by the communications unit in a data storage unit of the control unit;

wherein the control panel is capable of allowing an individual to manage a security system;

wherein an alarm system interface of the control panel is capable of interfacing with the security system;

wherein the control unit is capable of receiving the entry point visual and audio communications captured by the communications unit before actuation of the proximity detector located in the doorway or if the doorbell is pressed;

wherein the control unit is capable of receiving additional audio or video from the video camera after actuation of the proximity detector;

wherein the doorbell monitoring system is capable of establishing communication with the control unit upon actuation of the doorbell;

wherein at least a portion of the initial communication after the doorbell is actuated is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.

56. (New) The doorbell monitoring system of claim 55,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

57. (New) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

58. (New) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

59. (New) The doorbell monitoring system of claim 58, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

60. (New) The doorbell monitoring system of claim 58,
wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;
wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by a proximity detector; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

61. (New) The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

62. (New) The doorbell monitoring system of claim 61, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

63. (New) The doorbell monitoring system of claim 55,
wherein the control unit is capable of displaying the entry point visual and audio

communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

64. (New) The doorbell monitoring system of claim 55,

wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

65. (New) The doorbell monitoring system of claim 55, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

66. (New) The doorbell monitoring system of claim 55, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

67. (New) The doorbell monitoring system of claim 55, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

68. (New) The doorbell monitoring system of claim 67, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

69. (New) The doorbell monitoring system of claim 55, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

70. (New) The doorbell monitoring system of claim 55, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

71. (New) The system of claim 69, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

72. (New) The system of claim 69, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

73. (New) A doorbell monitoring system comprising:
a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry way, the video camera
and the external microphone, responsive to the triggering event, for capturing visual and audio
communications at the entry way and transmitting the captured visual and audio
communications;

an external speaker disposed in the entry way, the external speaker for rendering received
audio communications;

a control unit in communication with the video camera, the doorbell, and the external
microphone, the control unit for communicating at least one portion of the visual and audio
communications received from the video camera and external microphone, and for
communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular
telephone for capturing cellular audio communications at the cellular telephone, transmitting the
cellular audio communications to the control unit, and rendering the at least one portion of entry
point communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, a microcontroller,
data storage unit and a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker,
and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the
control unit;

wherein the control unit is capable of storing the entry point visual and audio
communications in a data storage unit of the control unit;

wherein the alarm system interface of the control panel is capable of interfacing with a security system;

wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime;

wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed;

wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event; and

wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system.

74. (New) The doorbell monitoring system of claim 73,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

75. (New) The doorbell monitoring system of claim 73, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before the proximity detector is triggered or the doorbell is triggered.

76. (New) The doorbell monitoring system of claim 73, wherein the single

communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

77. (New) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

78. (New) The doorbell monitoring system of claim 77, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

79. (New) The doorbell monitoring system of claim 77, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;

wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by a proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

80. (New) The doorbell monitoring system of claim 73, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;
and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

81. (New) The doorbell monitoring system of claim 73,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is capable of authenticating a user of the system;
wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

82. (New) The doorbell monitoring system of claim 73, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

83. (New) The doorbell monitoring system of claim 73, wherein the control unit is

configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

84. (New) The doorbell monitoring system of claim 73, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

85. (New) The doorbell monitoring system of claim 84, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

86. (New) The doorbell monitoring system of claim 73, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

87. (New) The doorbell monitoring system of claim 73, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

88. (New) The system of claim 86, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

89. (New) The system of claim 86, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

90. (New) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry way, the activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry way, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;

wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed; and

wherein the control unit is capable of receiving additional audio or video from the video

camera after actuation of the proximity detector.

91. (New) The doorbell monitoring system of claim 90,

wherein the proximity detector detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

92. (New) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.

93. (New) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

94. (New) The doorbell monitoring system of claim 93, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

95. (New) The doorbell monitoring system of claim 93,
wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event;
wherein the doorbell is capable of recording visual and audio communications before any

type of triggering event;

wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector;

wherein the doorbell monitoring system comprises an alarm system interface; and

wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.

96. (New) The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

97. (New) The doorbell monitoring system of claim 96, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

98. (New) The doorbell monitoring system of claim 90,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is capable of authenticating a user of the system;
and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.

99. (New) The doorbell monitoring system of claim 90,
wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is capable of authenticating a user of the system;

wherein the doorbell is capable of recording video and audio before any type of triggering event;

wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector;

wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

100. (New) The doorbell monitoring system of claim 90, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

101. (New) The doorbell monitoring system of claim 95, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

102. (New) The doorbell monitoring system of claim 90, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

103. (New) The doorbell monitoring system of claim 90, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions

after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

104. (New) The doorbell monitoring system of claim 103, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

105. (New) The doorbell monitoring system of claim 90, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

106. (New) The doorbell monitoring system of claim 90, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

107. (New) The system of claim 105, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

108. (New) The system of claim 105, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

109. (New) The method of claim 8, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

110. (New) The method of claim 8 further comprising:
communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

111. (New) The method of claim 8, further comprising:
storing at least a portion of the captured visual and audio communications by the single
communications unit at the control unit located locally to the entry point wherein the control unit
comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video
monitor communicatively coupled to the microcontroller.

112. (New) The method of claim 111, further comprising:
recording video after the proximity detector is triggered; and
sending the video recorded before and after the triggering of the proximity detector to the
cellular phone.

113. (New) The method of claim 8, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises
a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor
communicatively coupled to the microcontroller.

114. (New) The method of claim 8, further comprising:
providing an interface on the cellular phone that provides an option to request further
image or video data.

115. (New) The method of claim 8, further comprising:
providing an interface that provides an option to notify an alarm company.

116 (New) A method for providing doorbell monitoring, the method comprising:
ringing of a doorbell at an entry point;
responsive to the ringing of the doorbell, capturing visual and audio communications at
the entry point;
relaying at least a portion of the captured visual and audio communications to a cellular

phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point via a single communications unit;

wherein the single communications unit is configured to wirelessly stream the visual and audio communications via a wireless connection;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;

receiving at a control unit a request to send additional information regarding an event associated with the doorbell;

wirelessly streaming video communications from the single communications unit before the proximity detector is actuated; and

authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;

wherein the single communications unit also comprises a camera, the proximity detector, a microphone, and a speaker.

117. (New) The method of claim 116, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

118. (New) The method of claim 116, further comprising:

communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

119 (New) The method of claim 116, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

120. (New) The method of claim 119, further comprising:

recording video after the proximity detector is triggered; and
sending the video recorded before and after the triggering of the proximity detector to the cellular phone.

121. (New) The method of claim 116, further comprising:

activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

122. (New) The method of claim 116, further comprising:

providing an interface on the cellular phone that provides an option to request further image or video data.

123 (New) The method of claim 116, further comprising:

providing an interface that provides an option to notify an alarm company.

124. (New) A method for providing doorbell monitoring, the method comprising:

ringing of a doorbell at an entry point;

responsive to the ringing of the doorbell, capturing visual and audio communications at

the entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;

wherein the doorbell is part of a single communications unit which also comprises a camera, the proximity detector, a microphone, and a speaker;

wherein the camera is integrated into the doorbell;

sending from a control unit additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point;

wirelessly streaming video communications before the proximity detector is actuated; and

wirelessly streaming video communications after the proximity detector is actuated.

125. (New) The method of claim 124, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

126. (New) The method of claim 124, further comprising:

communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

127. (New) The method of claim 124, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

128. (New) The method of claim 127, further comprising:

recording video after the proximity detector is triggered; and
sending the video recorded before and after the triggering of the proximity detector to the cellular phone.

129. (New) The method of claim 124, further comprising:

activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.

130. (New) The method of claim 124, further comprising:

providing an interface on the cellular phone that provides an option to request further image or video data.

131. (New) The method of claim 124, further comprising:

providing an interface that provides an option to notify an alarm company.

REMARKS/ARGUMENT

In the Order, the Examiners found two substantial new questions of patentability (“SNQ”). The first was: “Claims 1 and 19 are obvious over Von Bauer in combination with Menard.” (“First SNQ”). The second was: “Claims 8 and 14 are obvious over Von Bauer, Menard, and Klein.” (“Second SNQ”). Order, p. 4; 7.

Claims 1 and 8 have been amended as shown above.

Claim 14 has been cancelled.

As amended, Claim 1 is patentable over Von Bauer in combination with Menard. As originally issued, Claim 19 as will be shown below is patentable over the combination of Von Bauer and Menard.

Claim 8 as amended are patentable over the combination of Von Bauer, Menard, and Klein as will be shown below.

New Claims 21-131 are presented. Of these, Claims 38, 55, 73, 90, 116, and 124 are independent claims. (Claims 1, 8, 19, and 21-131 referred to herein as “Pending Claims”).

I. Discussion of Written Description Support for Amendments

Patent Owner provides the following explanation of support for each limitation added by the amendments shown above. Due to the number of New Claims submitted, Patent Owner/Assignee attaches the Table of Exhibit A demonstrating where the support for each limitation may be found. However, out of abundance of caution and to assist in the review, explanation of support for each limitation is provided below with reference to claim limitations as enumerated in Exhibit A. By the explanation as well as the Table of Exhibit A Patent Owner has (1) provided support pursuant to 35 U.S.C. § 1.530, (2) demonstrated that the limitations as

amended are well supported by the Specification as required under 35 U.S.C. § 112(1), (3) that no new matter has been entered, and (4) that no broadening amendments have been made.

In so far as there are any differences between the limitations recited below and the amendments listed above in the section “Amendments to the Claims”, the amendments listed above in the section “Amendments to the Claims” control.

A. Independent Claims 1, 19, 38, 55, 73, and 90

Claims 1, 19, 38, 55, 73, and 90 are independent system claims. Limitations 1.1-1.7, 38.1-38.7, 55.1-55.7, 73.1-73.7, and 90.1-90.7 are from the original claim 1.

Limitations 1.1, 19.1, 38.1, 55.1, 73.1, and 90.1 is the preamble which recite: “[a] doorbell monitoring system comprising.” A doorbell monitoring system is depicted at least in Fig. 1 and described throughout the specification.

Limitations 1.2, 19.2, 38.2, 55.2, 73.2, and 90.2 recite: “a doorway having an environment.” A doorway having an environment is depicted in Fig. 1 (element 18). A doorway having an environment is also described in the specification in reference to Fig. 1. Col. 2 ll. 11-21 (“includes a doorway 18 to a home having an environment 20.”).

Limitations 1.3, 19.3, 38.3, 55.3, 73.3, and 90.3 recite “a doorbell located in an entry way, the activation of the doorbell being a triggering event.” Doorbell is disclosed as a part of the communication portion which “includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29” in particular embodiments. Col. 2 ll. 13-17. As the video camera 22 and exterior speaker 28 are disclosed as “disposed in the doorway” the doorbell could also be located in an entry way based on the specification. Col. 2 ll. 22-24. Furthermore, POSA would understand that the doorbell could be located in an entry way. The activation of the

doorbell being a triggering event is also disclosed in the specification. *E.g.*, Col. 3 ll. 4-5 (“a triggering event such as ringing of a doorbell.”).

Limitations 1.4, 19.4, 38.4, 55.4, 73.4, and 90.4 recite: “a video camera and an external microphone disposed in the entry way, the video camera and external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications.” A video camera and an external microphone disposed in the entry way is depicted in Fig. 1 (elements 22 and 24). They are also described in the specification in reference to Fig. 1. Col. 2 ll. 22-23 (“A video camera 22 and an external microphone 24 are disposed in the doorway 18.”). The specification describes an embodiment capturing visual and audio communications at the entry way in response to actuation of the proximity detector. *See e.g.*, Col. 2 ll. 35-44 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted”). A POSA would understand that another triggering event, such as ringing of a doorbell, could also initiate the same. *See also* Col. 7 ll. 36-45, Col. 7 ll. 31-45 (where requesting and receiving additional video in response to visitor at a doorway is described).

Limitation 19.5 recites: “a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway.” A proximity detector disposed in the entry way is depicted in Fig. 1 (element 26). It is also described in the specification in reference to Fig. 1. Col. 2 ll. 23-24 (“A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18.”). The proximity detector actuating the video camera and the external microphone in response to an individual approaching the doorway is also described. Col. 2 ll. 35-38 (“In operation, an

individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.").

Limitations 1.5, 19.6, 38.5, 55.5, 73.5, and 90.5 recite: "an external speaker disposed in the entry way, the external speaker for rendering received audio communications." An external speaker disposed in the entry way is depicted in Fig. 1 (element 28). It is also described in the specification in reference to Fig. 1. Col. 2 ll. 23-24 ("A proximity detector 26 and an external speaker 28 are also disposed in the doorway 18."). External speaker rendering received audio communications is also described in reference to Fig. 1. Col. 2 ll. 45-47 ("Similarly, the control unit relays captured cellular audio communications from the homeowner 16 to the external speaker 28."); Col. 6 ll. 8-9 ("At block 100, the audio communications are rendered at the entry point").

Limitations 1.6, 19.7, 38.6, 55.6, 73.6, and 90.6 recite: "a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker." A control unit is depicted in Fig. 2 (element 40). It is shown in Fig. 2 and described in the specification as in communication with the video camera, the doorbell, and the external microphone. It is also described as communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker. *E.g.*, Col. 3 ll. 9-26 ("A control unit portion 40, or control unit 40, controls a communication

portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44.”); Col. 4 ll. 32-35.

Limitations 1.7, 19.8, 38.7, 55.7, 73.7, and 90.7 recite: “a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit.” A cellular telephone is depicted in Fig. 2 (element 30). It is shown in Fig. 2 and described in the specification as disposed remotely to the doorway and the control unit. It is also described as capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit. *E.g.*, Col. 3 ll. 27-30 (“The cellular telephone network or cellular network 44 is employed to relay visual and audio data from the control unit to the cellular telephone 30 and relay audio data and control signals from the cellular telephone 30 to the control unit 40.”); Col. 4 ll. 27-35.

Limitation 19.9 recites “thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.” This is described in the specification. *E.g.*, Col. 2 ll. 47-52 (“In this manner, the homeowner is permitted to monitor the home in substantially realtime while away and, further, the homeowner 16 and individual 34 are able to communicate as if the homeowner 14 was at home.”).

Limitations 1.8, 38.8, and 73.8 cover a control unit which comprises of several elements. This is supported by at least by depiction in Fig. 3 and the specification which lists the components of the control unit which are connected to the microcontroller. *E.g.*, Col. 5 ll. 7-16 (“the components of the control unit 40 which are connected to the microcontroller 60 include a

switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74 ... A video monitor 76 is coupled to the microcontroller 60"). A Person of Ordinary Skill in the Art ("POSA") would understand that the connection means a communicative connection between the elements. This specification also supports later limitations which introduce other elements such as OGM player/recorder.

Limitations 1.9, 38.9, 55.8, 73.9, and 90.8 recite: "wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit." This single communication unit is depicted generally in Fig. 2 and 3 as element 42, but also described in the specification. *E.g.*, Col. 3 ll. 9-26 ("the communication portion 42 includes the video camera 22, the exterior microphone 24, the exterior speaker 28 and a doorbell 29, which may included as part of the communication portion 42 in particular embodiments."); Col 4 ll. 64 - Col. 5 ll. 6 ("proximity detector 26 of the communication unit 42").

Limitations 38.10, 55.9, and 73.10 recite: "wherein the entry point visual and audio communications are wirelessly streamed to the control unit." Wirelessly streaming is supported by the specification. The specification describes that components of the system may be connected wirelessly. *E.g.*, Col. 3 ll. 17-26 ("each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology"). The specification also describes rendering realtime visual and audio data and streaming. Col. 5 ll. 57-60 ("The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone

24.”); Col. 8 ll. 39-40 (“Alternatively, streaming audio and video may be delivered.”). In combination with wireless connections above, POSA would understand that visual and audio communications necessarily can be wirelessly streamed in the system. Therefore, wireless streaming is supported by the specification generally. The captured video and audio communications being streamed is also described. *E.g.*, Col. 2 ll. 36-44 (“At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 8 ll. 39-40 (“Alternatively, streaming audio and video may be delivered.”).

Limitation 38.11 recites: “wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor” which is supported by the specification. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitations 38.12, 55.10 and 73.11 recite: “wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit.” Limitation 55.10 additionally recites: “visual and audio communications captured by the communications unit.” This is supported by the specifications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”). Since the video camera 22 and exterior microphone 24 is part of the communications unit, 55.10 is also supported.

Limitations 38.13 and 55.11 recite: “wherein the control panel is capable of allowing an individual to manage a security system.” Specification supports with “the control panel 66 permits the homeowner or other individual to manage the security system 10.” Col. 5 ll. 39-40.

Limitations 38.14, 55.12, and 73.12 recite: “wherein the alarm system interface of the control panel is capable of interfacing with the security system” and variations thereof. The specification also describes “The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system.” Col. 5 ll. 42-44.

Limitations 38.15 and 73.13 recite: “wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime.” This is supported by the specification. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitations 38.16, 55.13, 73.14, and 90.10 recite: “wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed” and variations thereof. This is supported by the specification which describes receiving entry point visual and audio data “even prior” to actuation of the proximity detector. Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).

Limitations 38.17 and 73.15 recite: “wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.” The specification describes “a triggering event such as the ringing of a doorbell, initiates the contact of the control

unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.” Col. 3 ll. 6-8. Therefore, the specification supports additional audio or video from the video camera after the triggering event. Furthermore, the specification also describes requesting and receiving additional data after the triggering event. Col. 7 ll. 36-45; *see* Col. 7 ll. 31-45. Therefore, a POSA would understand that the control unit would be capable of receiving additional audio or video from the video camera after the triggering event.

Limitations 55.14 and 90.11 recite: “wherein the control unit is capable of receiving additional audio or video from the video camera after actuation of the proximity detector.” This reflects the operation contemplated in the specification. *E.g.*, Col. 2, ll. 35-38 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.”); Col. 6 ll. 14-18 (“As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively.”).

Limitation 55.15 recites: “wherein the doorbell monitoring system is capable of establishing communication with the control unit upon actuation of the doorbell.” This is also a reflection of the operation in the specification. *E.g.*, Col. 4 ll. 49-51 (“the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30.”).

Limitation 55.16 recites: “wherein at least a portion of the initial communication after the doorbell is actuated is a notification sent to the cellular telephone.” The specification supports

this limitation. *E.g.*, Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”).

Limitation 55.17 recites: “wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.” The specification supports this limitation. *E.g.*, Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).

Limitation 73.16 recites: “wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system.” A menu of options provided to the user is described in the specifications. Col. 6 ll. 56-67; *see also* Table 2. Options being activated using a voice activation system is also described. Col. 6 ll. 56-67 (“Alternatively, for example, a voice activated system may be utilized.”).

Limitation 1.10 and 90.9 recite: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications.” Specification describes an OGM player/recorder which is a device for presenting pre-recorded messages to visitors. Col. 5 ll. 27-35. Playing a pre-recorded message is also described in the specification. Col. 6 ll. 52-55 (“Additionally, the homeowner may preprogram the control unit to play a pre-recorded message from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.”); Col. 7 ll. 22-35 (“Option 2: Play a Pre-Recorded Greeting”). Furthermore, a POSA would understand that the pre-recorded message would be played on the communications unit which contains an external speaker.

Limitation 1.11 recites: “wherein the control unit is capable of receiving audio communications from the cellular telephone.” This is supported by the specification. *E.g.*, Col. 2

ll. 35-44; Col. 2 ll. 45-47 (“the control unit relays captured cellular audio communications”).

B. Dependent Claims 21-37, 39-54, 56-72, 74-89, 91-108

Claims 21-37, 39-54, 56-72, 74-89, 91-108 are dependent claims to claims 1, 38, 55, 73, and 90 respectively. Many of the dependent claims are repeated. Only exemplary dependent claims, 21-37, 40-41 are explained below.

Limitation 21.1 is a preamble which recites: “[t]he doorbell monitoring system of claim 1.”

Limitation 21.2 recites: “wherein the proximity detector detects a person proximate to the entry point.” A proximity detector is depicted in Fig. 1 (element 26). It is also described as part of the single communications unit. Col 4 ll. 64 - Col. 5 ll. 6 (“proximity detector 26 of the communication unit 42”). Proximity detector detecting a person proximate to the entry point is also described. Col. 2 ll. 35-36 (“an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated.”).

Limitation 21.3 recites: “wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event.” Detection by the proximity detector of a person proximate to the entry point as a triggering event is described in the specification. Col. 2 ll. 35-36 (“an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated.”); Col. 6 ll. 14-16 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block”). A POSA would understand from the description that the actuation of the proximity detector would constitute a triggering event.

Limitation 21.4 recites: “wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio

communications data to the control unit.” This reflects a contemplated operation. Col. 2 ll. 36-44 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit”); Col. 6 ll. 16-21 (“in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit.”).

Limitation 22 recites: “[t]he doorbell monitoring system of claim 1, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.” The single communications system configured to capture additional video from the video camera after the triggering event is described in the specifications. The specification describes “a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.” Col. 3 ll. 6-8. Furthermore, the specification describes that “the video camera 22 may be integrated into the doorbell 29 ... that the actuation of the doorbell establishes communication from the control unit portion 40 to the cellular telephone 30.” Col. 4 ll. 46-51. Therefore, the specification supports additional audio or video from the video camera after the triggering event. Furthermore, the specification also describes requesting and receiving additional data after the triggering event. Col. 7 ll. 36-45; *see* Col. 7 ll. 31-45. Therefore, a POSA would understand that the control unit would be capable of receiving additional audio or video from the video camera after the triggering event.

Limitations 23 and 24.1 recite: “[t]he doorbell monitoring system of claim 22, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.” This limitation is similar to limitation 21.4 and finds substantially similar support as well.

Limitation 24.2 recites: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event.” This is similar to limitations 38.16, 55.13, 73.14, and 90.10 above and finds the same support. Col. 6 ll. 21-24.

Limitation 24.3 recites: “wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector.” Support for wirelessly streaming is shown for limitation 1.10 above. Doorbell wirelessly streaming video communications after detection by a proximity detector is described in the specifications. Col. 2 ll. 35-41 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30 of the homeowner 16 via a control unit “); Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).

Limitation 24.4 recites: “wherein the doorbell monitoring system comprises an alarm system interface” which is supported by the specification. Col. 5 ll. 7-11 (“the components of the control unit 40 ... include ... an alarm system interface 68”).

Limitation 24.5 recites: “wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and

the single communications unit after a triggering event.” This is supported by the specification. Col. 4 ll. 21-26 (“In the instances when data is transferred to or from the cellular telephone via the Internet, the cellular network 44 may include onsite (or home) or offsite servers that are setup by a security company or the homeowner to facilitate the transfer of the data.”).

Limitation 25 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.” This is supported by the specification. Col. 5 ll. 55-57 (“data stored on the data storage unit 74 may be transferred to a different medium or played on a video monitor 76.”); Col. 6 ll. 15-20 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively. This visual and audio data is rendered on the video monitor”).

Limitation 26 recites: “The doorbell monitoring system of claim 25, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.” The specification describes displaying the entry point visual and audio communications in realtime. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitations 27.1 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor in substantially realtime” which is supported by the specification. Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially

realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).

Limitation 27.2 recites: “wherein the doorbell monitoring system is capable of authenticating a user of the system” which is supported by the specification. Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).

Limitation 27.3 recites: “wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Authentication one or more communications related to the doorbell monitoring system is described in the specifications. *E.g.*, Col. 6 ll. 39-55; Col. 8 ll. 15-18. Specifically, at least a call authentication is described in the specification. Col. 6 ll. 42-49.

Limitations 28.1-28.3 are repetition of limitations 27.1-27.3 and finds the same support.

Limitation 28.4 additionally recites: “wherein the doorbell is also capable of transmitting video communications after detection by the proximity detector.” Doorbell capable of transmitting video communications after detection by a proximity detector is described in the specifications. Col. 2 ll. 35-44 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”).

Limitation 28.5 recites: “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone;” The separate communication network is depicted in Fig. 2. Also, the communication

between doorbell and control panel is described in the specifications. Col. 3 ll. 9-26. The communication between the control panel to the cellular phone is distinctly described in the specifications. Col. 3 ll. 27-34, *see also*, Table 1.

Limitations 28.6 and 29 recite: “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” This is a similar limitation to limitations 38.12, 55.10 and 73.11 above and finds the same support.

Limitation 30.1 recites: “[t]he doorbell monitoring system of claim 1, wherein the alarm system interface is connected to an alarm system” which is disclosed in the specifications. Col. 5 ll. 42-44 (“The alarm system interface 68 interfaces the security system 10 described herein with the homeowner's existing home security system.”).

Limitation 30.2 recites: “wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.” Specification describes that “The video monitor 76 and interior microphone 80, when used together, provide a traditional monitor with intercom system for the homeowner.” Col 5. ll. 63-65. Furthermore, a menu which is an interface that allows user of a cellular telephone to take an action is described in the specification. Col. 6 ll. 56-67; *see also*, Table 2. A POSA would understand that the traditional video monitor would have a graphical user interface to allow an individual to manage the alarm system.

Limitation 31 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.” This is supported by the specification. *E.g.*, Col 6 ll. 28-34 (“the control unit generates an image or video file that

includes at least a portion of the visual or audio/visual data collected by the video camera and the exterior microphone.”).

Limitation 32 and 33 regards a cellular telephone interface with several options. The interface and options are described and supported in the specification. Col 6 ll. 56-67; Col. 7 ll. 22-35; Col. 7 ll. 52-65; *see also*, Table 2.

Limitations 34 recites: “[t]he doorbell monitoring system of claim 1, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.” At least the data storage is an onsite storage device. *See* Col. 5 ll. 7-16 (“components of the control unit 40 ... include ... a data storage unit 74”); *see also* Col. 3 ll. 17-19. (“Preferably, the control unit 40 is located onsite”) Data storage unit is described as capable of storing entry point visual and audio communications. Col 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).

Limitation 35 recites: “[t]he doorbell monitoring system of claim 1, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.” This is supported by the specification. *E.g.*, Col. 2 ll. 36-40 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”); Col. 5 ll. 55-57 (“Moreover, data stored in the data storage unit 74 may be transferred to a different medium or played on the video monitor 76.”).

Limitation 36 recites: “[t]he system of claim 34, wherein wherein the onsite storage

device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.” This is supported by the specification. *E.g.*, Col. 2 ll. 53-58 (“Accordingly, the security system 10 and accompanying method presented herein permit the homeowner 16 or designated entity or individual, who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.”); Col. 8 ll. 4-8 (“The operations of blocks 132 and 134 permit the homeowner who may be onsite or at a remote location, to view and talk to a visitor (or perpetrator) in realtime or substantially realtime, without the homeowner's location being disclosed.”).

Limitation 37 recites: “[t]he system of claim 34, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.” Wired connections are supported by the specification generally. *E.g.*, Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by a wired connection”); Col. 5 ll. 16-19 (“It should be appreciated that these components described in FIG. 3 may be connected to the microcontroller 60 and interconnected by wired connections, wireless connections, or a combination thereof.”).

Limitations 40 and 41 are similar to limitation 1.10 above and finds the same support. However, limitation 40 and 41 discloses single communication unit “capturing video before the proximity detector is triggered or the doorbell is triggered” and “capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user.” This is described in the specification. Col. 3 ll. 1-8 (“The video cameras 22 may be each be motion activated and begin recording video in response to actuation at any type of entryway to any time of property or structure. In this implementation, a triggering event such as the ringing

of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.”); Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).

C. Independent Claims 8, 116, and 124.

Claims 8, 116, and 124 are method claims. Limitations 8.1-8.7, 116.1-116.7 and 124.1-124.8 are from the original claim 1.

Limitations 8.1, 116.1, and 124.1 recite: “[a] method for providing doorbell monitoring, the method comprising.” A method for providing doorbell monitoring is at least depicted in Fig. 4. The method is also described in relation to Fig. 4 in the specification. *E.g.*, Col. 5 ll. 66 - Col. 6 ll. 12.

Limitations 8.2, 116.2, and 124.2 recite: “ringing of a doorbell at an entry point.” Ringing the doorbell at an entry point is disclosed in the specification. *E.g.*, Col. 3 ll. 4-6.

Limitations 8.3, 116.3, and 124.3 recite: “responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point.” Capturing visual and audio communications at the entry point is depicted in Fig. 4. It is also described in relation to Fig. 4 in the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 90, visual and audio communications are captured at an entry point.”). A POSA would understand that the process would be initiated from a triggering event which is the ringing of the doorbell. *E.g.*, Col. 3 ll. 4-5 (“a triggering event such as ringing of a doorbell.”) See also, Col. 7 ll. 36-45, Col. 7 ll. 31-45 (where requesting and receiving additional video in response to visitor at a doorway is described).

Limitations 8.4, 116.4 and 124.4 recite: “relaying at least a portion of the captured visual and audio communications to a cellular phone.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 92, at least a portion of the captured visual and audio communications are relayed to a cellular telephone.”).

Limitations 8.5, 116.5, and 124.5 recite: “rendering the least a portion of the captured visual and audio communications at the cellular phone.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 94, the at least a portion of the captured visual and audio communications are rendered at the cellular telephone.”).

Limitations 8.6, 116.6, and 124.6 recite: “capturing audio communications at the cellular phone.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 96, audio communications are captured at the cellular phone.”).

Limitations 8.7, 116.7, and 124.7 recite: “relaying the audio communications from the cellular phone to the entry point.” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“The audio communications are relayed from the cellular phone to the entry point at block 98.”).

Limitations 8.8, 116.8, and 124.8 recite: “rendering the audio communications at the entry point” This reflects a step in Fig. 4 and the specification. Col. 5 ll. 66 - Col. 6 ll. 12 (“At block 100, the audio communications are rendered at the entry point”).

Limitations 8.8 and 116.8 also adds the phrase via the communications unit. As explained above, external speaker is described as part of the communications unit and therefore audio communication would be rendered through the communications unit.

Limitations 8.9 and 116.9 relate to wirelessly streaming visual and audio communications with the communications unit. Support for wirelessly streaming is shown above. *See* 1.10.

Communication unit configured to communicate the visual and audio communications via a wireless connection is depicted in Fig. 2 and described in the specification. Col. 3 ll. 17-26 (“each of the components of the communication portion 42 may be connected to the control unit portion by ... a wireless connection scheme, such as a network utilizing wireless local area technology or radio frequency technology”).

Limitations 8.10, 116.10, 124.9 are generally recite: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection.” Sending a notification to the cellular phone is described in the specification. *E.g.*, Col. 2 ll. 35-44 (where actuation of the proximity detector initiating communication to the cellular telephone is described); Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”). Range of detection is inherent in a proximity detector. Therefore, a POSA would understand that a proximity detector would be set with a predetermined range of detection.

Limitations 8.11 and 116.11 recite: “receiving at the control unit a request to send additional information regarding an event associated with the doorbell.” This is supported by the specification. Col 4. ll. 57-64 (“In response to the notification, the homeowner 16 may send a signal to the control unit portion 40 to either ignore the notification and event or accept more information including images or video about the notification and event.”).

Limitations 8.12 and 124.13 recite: “notifying a home security company when an emergency event occurs at the entry point” which is supported by the specification. *E.g.*, Col. 5 ll. 45-48 (“notify a home security company or the police department in the instance of a break-in or other crime.”); Col. 7 ll. 54-59 (“Option 6: Notify Alarm Company allows the homeowner to

notify the alarm company or alternatively the police department of a potential or actual problem.”).

Limitations 8.13, 116.12, and 124.14 recite: “sending video communications before the proximity detector is actuated”, “wirelessly streaming video communications from the single communications unit before the proximity detector is actuated”, and “wirelessly streaming video communications before the proximity detector is actuated” This is substantially similar to limitations 38.16, 55.13, 73.14, and 90.10 and finds the same support.

Limitations 8.14 and 116.13 recite: “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;” This is a step contemplated in the specification. *E.g.*, Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated. By way of example, in one implementation, the homeowner may be required to enter a passcode to authenticate the identity of the homeowner. If the homeowner does not enter the passcode, then the call is disconnected.”).

Limitations 8.15, 116.14, and 124.10 recite: “wherein the doorbell is part of the single communications unit which also comprises the camera, the proximity detector, a microphone, and a speaker” and variations thereof. These are similar limitations as limitations 1.9, 38.9, 55.8, 73.9, and 90.8 above and finds the same support.

Limitation 124.11 recites: “wherein the camera is integrated into the doorbell” which is supported by Col. 4 ll. 46-51 “the video camera 22 may be integrated into the doorbell 29.”

Limitation 124.12 recites: “sending from a control unit additional information regarding an event associated with the doorbell” which is a step contemplated in the specification. *E.g.*, Col. 4. ll. 56-64 (“the homeowner 16 may send a signal to the control unit portion 40 to either

ignore the notification and event or accept more information including images or video about the notification and event.”).

Limitation 124.15 recites: “wirelessly streaming video communications after the proximity detector is actuated.” This is similar to limitations 55.14 and 90.11 and finds the same support.

D. Dependent Claims 110-115, 117-123, and 125-131

Claim 109-115, 117-123, and 125-131 are dependent claims to independent claims 8, 116, and 124 respectively. The dependent claims are repeated. Only exemplary dependent claims, 109-115 are explained below.

Limitation 109 recites “[t]he method of claim 8, wherein rendering at the cellular phone further comprises: rendering a menu option that when selected would take no action based upon an actuation of a security system.” Menu options are covered above and menu option for no action is described in the specifications. Col. 7 ll. 15-21 (“Option 1: No Action”).

Limitation 110 recites: “[t]he method of claim 8 further comprising: communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.” This is supported by the specification. *E.g.*, Col. 3 ll. 9-26 (“A control unit portion 40, or control unit 40, controls a communication portion 42 and relays data and communications between the communication portion 42 and the cellular telephone 30 via a cellular network 44.”); Col. 4 ll. 32-35.

Limitation 111.1 recites: “[t]he method of claim 8, further comprising: storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point.” This is supported by the specification. Col. 5. ll. 51-55 (“The data storage unit 74 comprises a recordable medium for

storing data relevant to the security system 10. For example, the video and audio data gathered by the video camera 22 and the exterior microphone 24, respectively, may be stored at the data storage unit 74.”).

Limitation 111.2 recites: “wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” This is similar to limitations 1.8, 38.8, and 73.8 and finds the same support.

Limitation 112 recites: “[t]he method of claim 111, further comprising: recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” This is supported by the specification. Col. 6 ll. 14-19 (“At block 110, an individual approaches the entry point. As a result, a proximity detector is actuated at block 112 and, in turn, as shown in block 114, the video camera and exterior microphone begin capturing visual and audio data, respectively ... At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114. At the control unit, in one implementation, the data is stored in the data storage.”).

Limitation 113.1 recites: “[t]he method of claim 8, further comprising: activating an alarm system interface via a control unit.” Step of activating an alarm system interface via a control unit is described in the specifications. Col. 5 ll. 39-48 (“In one implementation, the control panel 66 is onsite as well as accessible through the cellular telephone 30 ... By way of example, this feature permits the homeowner to utilize the cellular telephone 30 to notify a home security company or the police department in the instance of a break-in or other crime.”); Col. Col 7 ll. 54-59 (“Option 6: Notify Alarm Company”).

Limitation 113.2 recites: “wherein the control unit comprises a switch, a control panel, an

alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” This is similar to limitations 1.8, 38.8, and 73.8 and finds the same support.

Limitation 114 recites: “[t]he method of claim 8, further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.” Interface on a cellular phone that provides an option to request further image or video data is described in the specification. Col. 6 ll. 56-67; *see also*, Table 2; Col 7 ll. 36-48 (“Option 3: Request Further Image or Video Data”).

Limitation 115 recites: “[t]he method of claim 8, further comprising: providing an interface that provides an option to notify an alarm company.” Interface on a cellular phone that provides an option to notify an alarm company is described in the specification. Col. 6 ll. 56-67; *see also*, Table 2; Col 7 ll. 54-59 (“Option 6: Notify Alarm Company”).

Thus, by all the above and Table of Exhibit A, Patent Owner/Assignee has (1) provided support pursuant to 35 U.S.C. § 1.530, (2) demonstrated that the limitation as amended are well supported by the specification, (3) that no new matter has been entered, and (4) that no broadening amendments have been made.

II. Pending Claims are Patentable Over the Prior Art

A. Discussion of the Law of Obviousness

Where a single prior art reference does not anticipate a claim, the claim may nevertheless be invalid for obviousness. 35 U.S.C. § 103(a). A claim “is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); *see also Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017). “As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is

stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).” M.P.E.P. § 2141. The “Graham” factors are as follows: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the claimed invention and the prior art; (3) resolving the level of ordinary skill in the art; and (4) objective evidence, that is, “secondary considerations.” *Id.*

After consideration of the *Graham* factors, an obviousness determination requires two separate factual findings:

[1] a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and [2] that the skilled artisan would have had a reasonable expectation of success in doing so.

Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd., 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (quoting *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012); *Eli Lilly & Co. v. Teva Pharms. Int’l GmbH*, 8 F.4th 1331, 1344 (Fed. Cir. 2021). Both inquiries are questions of fact. *Id.*; *Virtek Vision Int’l ILC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886 (Fed. Cir. 2024).

It is axiomatic that a difference between anticipation and obviousness is that each limitation need not be present in a single piece of prior art for the invention to be obvious. To prove obviousness, all of the limitations must be present in the combination of references relied upon. *Application of Royka*, 490 F.2d 981, 985 (CCPA 1974); *Roku, Inc. v. ITC*, 90 F.4th 1367, 1374 (Fed. Cir. 2024) (affirming ITC findings on nonobvious where administrative judge found that one limitation was missing from the combination); *see also Intellectual Ventures I, LLC v. Motorola Mobility LLC*, 176 F. Supp. 3d 405, 428 (D. Del. 2016), *aff’d in relevant part* 870 F.3d 1320 (Fed. Cir. 2017); *Upsher-Smith Labys., Inc. v. Pan American Labs., Inc.*, 2003 WL 22999551, at *4 (D. Min. Dec. 19, 2003) (stating that “[t]o establish invalidity on obviousness

grounds, the moving party must show by clear and convincing evidence that all claim limitations are present in a combination of prior art references,” citing *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001)). “Knowledge of a POSA” or “common sense” can be used to “fill in” for a limitation missing in a reference or combination of references. However, additional showings beyond the bare allegation must be made. *Arendi v. Apple, Inc.*, 832 F. 3d 1355, 1363 (Fed. Cir. 2016); *DSS Technology Mgmt., Inc. v. Apple Inc.*, 885 F.3d 1367, 1374 (Fed. Cir. 2018) (emphasis added).

As the Federal Circuit has noted:

Only after considering **all** Graham factors are the “motivation to combine” and “reasonable expectation of success” considered in order to protect against hindsight bias in reaching the ultimate legal question as to whether the invention would have been obvious. A determination of whether a claim is invalid as obvious under § 103 requires consideration of all four Graham factors, and it is error to reach a conclusion of obviousness **until** all those factors are considered.

Apple Inc. v. Samsung Elecs. Co., Ltd., 839 F.3d 1034, 1048 (Fed. Cir. 2016) (emphasis added).

Without the context provided by the identification of the differences, the discussion of motivation to combine makes little sense. After all, the purpose of the *Graham* factors, including the second "differences" factor, is to guard against hindsight bias in reaching the ultimate legal conclusion of obviousness. *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litigation*, 676 F.3d 1063, 1079 (Fed. Cir. 2012). Only after identifying the differences should the two factual inquiries – motivation to combine and reasonable likelihood of success—be evaluated. *Apple*, 839 F.3d at 1048.

The M.P.E.P. correctly summarizes Federal Circuit precedent as follows:

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir.

1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983)

....

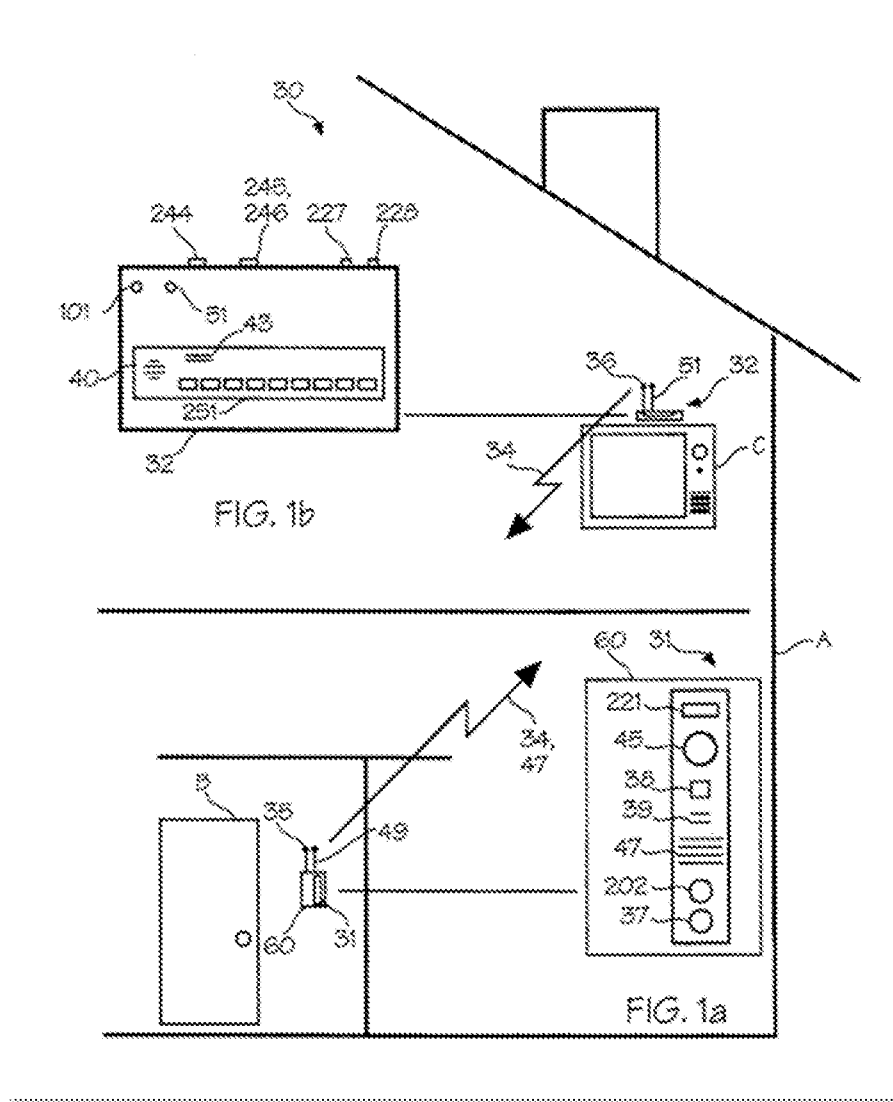
M.P.E.P., Ninth Edition, Rev. 07.2022, Pbl. Feb 2023, Section 2141.02 (emphasis added).

B. Scope and Content of Prior Art

The Examiners ordered reexamination based on three prior art references: (1) Von Bauer, (2) Menard, and (3) Klein. The Patent Owner provided a brief description of each in the Corrected Request for Reexamination. *See* Section V, p. 3. The following are more detailed descriptions of each.

1. Von Bauer

Von Bauer is titled “Video Doorbell System” and issued on June 27, 1995. As shown in Fig. 1 shown below, Von Bauer’s system has two primary components: (1) the doorbell station (31) located near the entranceway (B) to a building (A); and (2) the Video Receiver Station (32) located within the building (A), typically near a TV monitor (C):



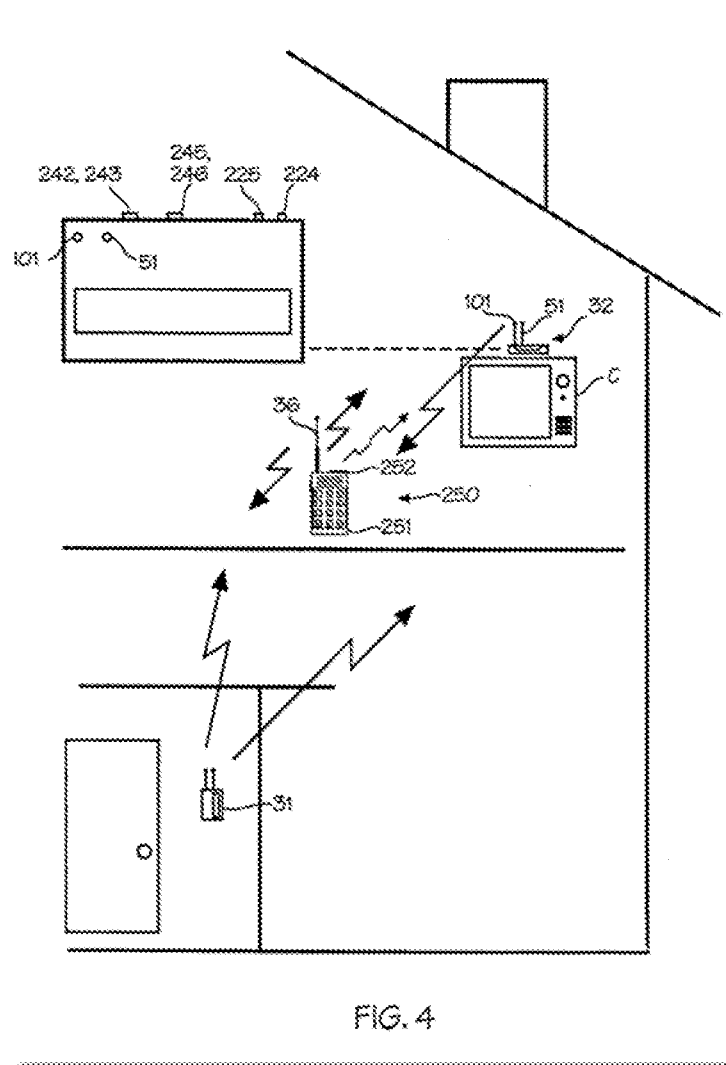
Von Bauer at Fig. 1a

Von Bauer, Fig. 1, *see also* Col. 6, ll.

Von Bauer's system is designed to work with a user's existing TV monitor, marked C above. The Video Receiver Station connects to the TV monitor to allow a user to view images of objects viewed by the camera and to permit "normal viewing operations" such as "a normal broadcast or cable program" otherwise.

In an alternate embodiment, a hand-held wireless controller and voice communicator (250) and a relay station (mistakenly denoted by 32 below but not specifically numbered in the patent) can be used in place of the Video Receiver Station. Von Bauer, 14:59-15:14 ("FIG. 14 is

a schematic diagram of a wireless controller and voice communicator useable in place of Video Receiver Station 32 shown in FIGS. 12 and 13”). Wireless controller and voice communicator 250 comprises a self-contained, battery powered, hand-held apparatus that performs most of the functions of the Video Receiver Station depicted in FIGS. 12 and 13 and described above. FIG. 15 shows a relay station which is used in conjunction with the apparatus 250 of FIG. 14.”).



Von Bauer at Fig. 4

The hand-held wireless controller and voice communicator 250 does not receive video and audio signals from the doorbell station 31. Those are received by the relay device (including antenna 51 coupled to a video receiver 50), which is a separate device that is used in conjunction

the hand-held wireless controller and voice communicator 250. Von Bauer at 14:59-15:14 (“FIG. 15 shows a relay station which is used in conjunction with the apparatus 250 of FIG. 14. . . when using hand-held communicator 250, a video receiver 50 (FIG. 15) may be connected to a video modulator that produces an RF output signal on an unused channel (Channel 3 or Channel 4), the output of which is connected to antenna input multiplier of a television monitor. Thus, if the monitor is commanded to receive Channel 3, for example, a normal broadcast or cable program will be interrupted and replaced by the video signal received from a Video Doorbell Station 31 by video receiver 50.”); *see also* 15:15-25; *compare* Figs. 12 and 13 *with* Figs. 14 and 15. This is also clear from Fig. 4 above, where the hand-held wireless controller and voice communicator 250 includes antenna 36 for receiving audio signals from the Doorbell System but the relay station that includes antenna 51 for receiving video signals is a separate device that is connected to the TV monitor C. The hand-held wireless controller

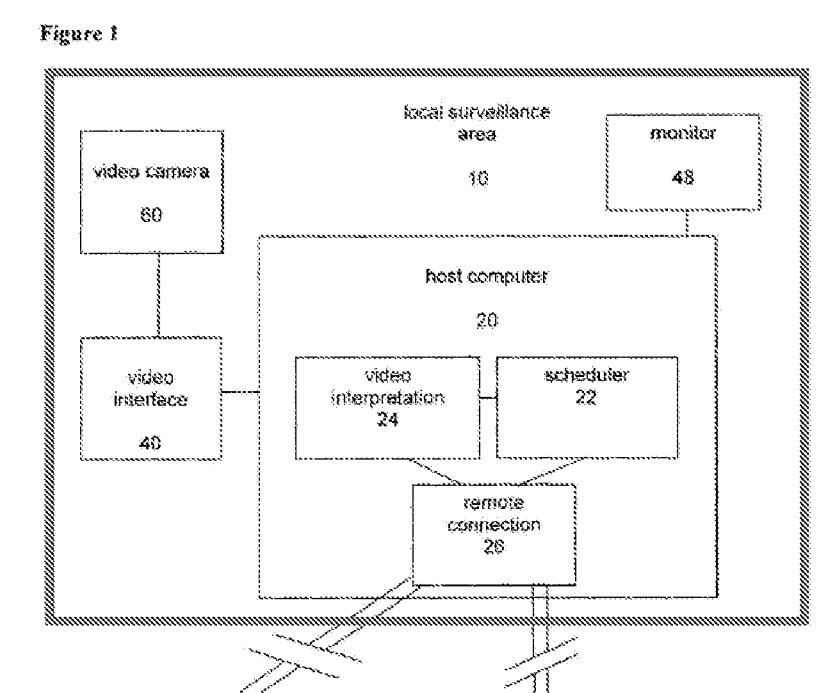
2. Menard

Menard is an omnibus reference that has 25+ embodiments directed to “detecting and monitoring at least one event or condition of interest” that describes everything from a coffee maker to an alarm clock. *See, e.g.*, Menard, pp. 23:25-24:14. Menard at most has three embodiments related to doorbells or an interior camera and refers to these embodiments as “module 200D” and “module 200E,” shown in Figures 7-10. *Id.*, Figs. 7-10. These figures do not contain information beyond showing elements such as intercoms and deadbolts that may be located at a front door. *Id.* Module 200 is generic, and Menard labels various elements with a “200XX” labeling system such as, for example, 200F is an alarm clock, 200G is a coffee maker, 200H is a television, 200J is an air conditioner, 200K is a furnace, 200M is a glass break sensor, 200U is a siren, 200AA is a thermometer. The only embodiments in Menard that relate to

doorbells in the written description are discussed generally at Pages 19:30–22:29 in the written description. Menard, pp.19-22. Figure 7 shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A. Menard, Fig. 7; p. 20, ll. 2 – 4. Menard provides no enablement for its various embodiments, instead focusing on the general concept of remote monitoring without attention to the details of the specific hardware needed to implement.

3. Klein

Klein is directed to “security or surveillance systems employed *in* homes and businesses.” Klein, [0002]-[0006] (emphasis added). To that end, Klein discloses a “local surveillance area 10” that includes “video camera 60,” “video interface 40,” monitor 48,” and “host computer 20,” among other components, which are all inside the “local surveillance area 10,” as shown in Fig. 1. Klein, Fig. 1 (annotation added):



See also Klein, [0016]-[0017] (“Referring to FIG. 1, the video surveillance system of the present

invention comprises a local video surveillance connection and an optional remote video surveillance connection. The local video surveillance connection is located in the local surveillance area 10, which includes the specific area intended to be kept under surveillance. A video camera 60 is mounted in a position in the local surveillance area 10 in the desired viewing location.”); *see also* Klein, [0021]. The “local surveillance area 10” is not at the “exterior.” For example, as Klein discloses, “[t]he user may then adjust the camera 60 viewing angle to *include areas of interest for monitoring, such as a cash register or an entry door.*” Klein, [0038] (emphasis added). As Klein goes on to explain, “motion detection at an entry door” detects “normal after-hours entry” and “entries outside the normal ours.” *Id.* at [0042]. Thus, Klein discloses a system that detects motion after an intruder has entered and does not teach a “doorbell monitoring system” as claimed.

C. Pending Claims are Non-obvious in view of SNQ1 and SNQ2

Below, differences are identified as between the inventions of the Pending Claims and the references cited in SNQ 1 and SNQ 2. However, it should be understood that the differences identified below are not exclusive to others and that Patent Owner reserves the right to make additional distinctions if needed. For at least the following reasons, the Pending Claims should be found to be patentable.

1. Invention of Independent Pending Claim 1 as Amended

Claim 1 is directed to a “doorbell monitoring system” having a “doorbell.” The Examiners found “a substantial new question of patentability” as to Claim 1 in view of Von Bauer in combination with Menard. Order, p. 5.

As correctly noted by Examiners, Von Bauer does not disclose “cellular audio communications.” Order, p. 4. To provide this missing teaching, the Examiners cited Menard.

As an initial matter, Menard does not disclose a doorbell monitoring system but rather a surveillance system. Furthermore, the limitation in original Claim 1 and in Amended Claim 1 shown above regarding “cellular audio communications” contains additional limitations that are not met by Menard: “a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the *cellular audio communications to the control unit*, and rendering the at least one portion of entry point communications received from the control unit.” While Menard shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A, it does not show cellular communications “to the control unit.”¹ Menard, p. 20 Fig. 7; p. 20, ll. 2 – 4. Therefore, Claim 1 as originally issued is not obvious in view of the combination of Von Bauer and Menard because, among other reasons, the combination lacks this crucial “to the control unit” limitation. Furthermore, Patent Owner asserts that there would have been no motivation to combine the two references.

Nevertheless, in order to move this proceeding to conclusion, Claim 1 has been amended to add yet additional limitations that are also missing from the combination of Von Bauer and Menard. Those limitations are as follows.

The limitation “the control unit comprising ... alarm system interface... and a video monitor” is not shown in Von Bauer. Menard also does not teach a video monitor nor a “microcontroller” (as also required). Thus, Claim 1 (Amended) is non-obvious in view of the combination for at least this additional reason.

¹ Patent Owner notes that there is an embodiment wherein the cellular telephone communicates with the exterior module via LD communication module 250. Menard pp. 16, 21; Fig. 3A. However, Menard does not make clear the full functionality of that module. What is clear is that LD communication module 250 does not meet the definition of a “control unit” and is therefore not a control unit as contemplated by the Pending Claims in this Amendment and Response.

Neither Von Bauer nor Menard teach playing a “pre-recorded message.” Thus, Claim 1 (Amended) is non-obvious in view of the combination for at least this additional reason.

As noted above, neither Von Bauer nor Menard teach a “control unit” that communicates with a cellular phone. To further emphasize that this functionality is required,² Patent Owner has amended Claim 1 to include: “wherein the control unit is capable of receiving audio communications from the cellular telephone.” As already noted, neither Von Bauer nor Menard disclose this. Von Bauer does not disclose a cellular phone, and the “exterior module” of Menard directly communicates with a cellular phone and not a “control unit” as required. Thus, Claim 1 (Amended) is non-obvious in view of the combination for at least this additional reason.

Having reviewed the differences, one must review the motivation to combine and the reasonable likelihood of success. As an initial matter, a POSA would not have been motivated to combine the analog doorbell monitoring system of Von Bauer with the system of Menard. The system of Von Bauer utilized an analog “composite video signal” sent by an FM transmitter. Von Bauer, Col. 7, ll. 25 – 33. Menard utilized digital communications. *See* Menard, p. 20, l. 13 – 20. Even assuming a motivation, extensive modifications to the “Video Receiver Station” of Von Bauer to allow communications with the cell phone shown in Menard. Therefore, in view of the missing limitations shown above and/or the lack of motivation to combine or likelihood of success, and viewing Claim 1 as a whole, a POSA would not find the invention of Claim 1 as issued much less Claim 1 (Amended) obvious.

2. Invention of Independent Claim 8 as Amended

Claim 8 is directed to a “a method for providing doorbell monitoring.” The Examiners

² The Menard embodiment described in fn. 1 has no relevance to this analysis because neither that embodiment nor any other in Menard teach a control unit as contemplated by these amended claims.

found “a substantial new question of patentability” as to Claim 8 in view of Von Bauer in combination with Menard and Klein. Order, p. 5.

As correctly noted by Examiners, Von Bauer does not disclose “cellular audio communications.” Order, p. 6. To provide this missing teaching, the Examiners cited Menard. As an initial matter, Menard does not disclose a doorbell monitoring system but rather a surveillance system.

Nevertheless, Claim 8 has been amended to add yet additional limitations that are also missing from the combination of Von Bauer, Menard, and Klein. Those limitations are as follows.

None of these references teach “wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit.” As explained above, the communications in Menard are sent to the cellular phone directly by the exterior module 220A. *See* fn. 2. For the reason that Menard does not teach a “control unit” that relays information between the exterior module and cellular phone, Menard does not teach “receiving at the control unit a request to send additional information regarding an event associated with the doorbell.” Also, Klein does not disclose this limitation.

None of Von Bauer, Menard, or Klein teach “notifying a home security company when an emergency event occurs at the entry point.”

None of Von Bauer, Menard, or Klein teach “sending video communications before the proximity detector is actuated.”

None of Von Bauer, Menard, or Klein teach “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone.”

Having reviewed the differences, one must review the motivation to combine and the reasonable likelihood of success. As an initial matter, a POSA would not have been motivated to combine the analog doorbell monitoring system of Von Bauer with the system of Menard or the “Digital Video Security System” of Klein. The system of Von Bauer utilized an analog “composite video signal” sent by an FM transmitter. Von Bauer, Col. 7, ll. 25 – 33. Menard utilized digital communications. *See* Menard, p. 20, l. 13 – 20. Even assuming a motivation, extensive modifications to the “Video Receiver Station” of Von Bauer to allow digital communications with the cell phone shown in Menard. Therefore, in view of the missing limitations shown above and/or the lack of motivation to combine or likelihood of success, and viewing Claim 8 as a whole, a POSA would not find the invention Claim 8 (Amended) obvious.

3. Invention of Independent Pending Claim 19

Claim 19 is directed to a “system for providing doorbell monitoring.” The Examiners found “a substantial new question of patentability” as to Claim 1 in view of Von Bauer in combination with Menard. Order, p. 5. For reasons explained below, Claim 19 is patentable over the combination of Von Bauer and Menard.

As correctly noted by Examiners, Von Bauer does not disclose “cellular audio communications.” Order, p. 4. To provide this missing teaching, the Examiners cited Menard. As an initial matter, Menard does not disclose a doorbell monitoring system but rather a surveillance system. Furthermore, there are several limitations in original Claim 19 regarding “cellular audio communications” that are not met by Menard, including at least: (1) “a control unit ... for communicating the received cellular audio communications to the external speaker” and (2) “a cellular telephone ... transmitting the cellular audio communications to the control unit.” As explained above, Menard does not disclose a cellular phone that communicates with a

control unit. Menard, p. 20 Fig. 7; p. 20, ll. 2 – 4. While Menard shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A, it does not show cellular communications “to the control unit.” Menard, p. 20; Fig. 7; p. 20, ll. 2 – 4.

In addition, there is no disclosure in Von Bauer or Menard of “a cellular telephone ... rendering the at least one portion of doorway communications received *from the control unit*...” ‘191 Patent, Claim 19, ll. 57 – 61. As already noted, Menard does not show a “control unit” communicating with a cellular phone.

Therefore, Claim 19 as originally issued is not obvious in view of the combination of Von Bauer and Menard because, among other reasons, the combination lacks the limitations noted above.

Having reviewed the differences, one must review the motivation to combine and the reasonable likelihood of success. As an initial matter, a POSA would not have been motivated to combine the analog doorbell monitoring system of Von Bauer with the system of Menard. The system of Von Bauer utilized an analog “composite video signal” sent by an FM transmitter. Von Bauer, Col. 7, ll. 25 – 33. Menard utilized digital communications. *See* Menard, p. 20, l. 13 – 20. Even assuming a motivation, extensive modifications to the “Video Receiver Station” of Von Bauer to allow communications with the cell phone shown in Menard. Therefore, in view of the missing limitations shown above and/or the lack of motivation to combine or likelihood of success, and viewing Claim 19 as a whole, a POSA would not find the invention of Claim 19 as issued) obvious.

4. New Dependent Claim 21 is non-obvious

Dependent Claim 21 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 21 is also non-obvious. Claim 21 also patentable for at least the

additional reason that neither Von Bauer nor Menard disclose the limitation “wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data *to the control unit*.”

5. New Dependent Claims 22 – 23

Dependent Claims 22 depends from Claim 1. Claim 23 depends from Claim 22. Because Claim 1 is non-obvious for the reasons explained above, Claims 22 – 23 are also non-obvious.

6. New Dependent Claim 24

Dependent Claim 24 depends from Claim 22. Because Claim 22 is non-obvious for the reasons explained above, Claim 21 is also non-obvious. Claim 24 is also patentable for at least the additional reasons that neither Von Bauer nor Menard disclose the limitations: “wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event; wherein the doorbell is capable of recording visual and audio communications *before any type of triggering event*; wherein the doorbell is also capable of *wirelessly streaming video communications* after detection by the proximity detector;” and “wherein the doorbell monitoring system comprises *an alarm system interface*; and wherein the doorbell monitoring *system employs one or more offsite servers* to facilitate communications between the cellular telephone, *the control unit*, and the single communications unit after a triggering event.” Hence, Claim 24 is non-obvious for the additional reason that these limitations are missing from the combination.

7. New Dependent Claims 25 and 26

Dependent Claim 25 depends from Claim 1. Claim 26 depends on Claim 25. Because

Claim 1 is non-obvious for the reasons explained above, Claims 25 and 26 are also non-obvious.

8. New Dependent Claim 27

Claim 27 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 27 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitations: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 27 is non-obvious.

9. New Dependent Claim 28

Claim 28 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 28 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitations: [1] wherein the doorbell monitoring system is capable of authenticating a user of the system; [2] wherein the doorbell is capable of recording video and audio before any type of triggering event; [3] wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; [4] wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit. Therefore, Claim 28 is non-obvious in view of these limitations that are missing from Von Bauer and Menard.

10. New Dependent Claim 29

Claim 29 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 29 is also non-obvious. In addition, neither Von Bauer or Menard

teaches the following limitation: “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 29 is non-obvious in view of these limitations that are missing from Von Bauer and Menard.

11. New Dependent Claim 30

Claim 30 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 30 is also non-obvious. Therefore, Claim 30 is non-obvious in view of this additional limitations that is missing from Von Bauer and Menard.

11. New Dependent Claim 31

Claim 31 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 31 is also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitation: “wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.” Therefore, Claim 31 is non-obvious in view of this additional limitation that is missing from Von Bauer and Menard.

12. New Dependent Claim 32

Claim 32 depends from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claim 32 is also non-obvious.

13. New Dependent Claim 33

Claim 33 depends from Claim 32. Because Claims 1 and 32 are non-obvious for the reasons explained above, Claim 33 is also non-obvious.

14. New Dependent Claim 34

Claim 34 depends from Claim 1. Because Claim 1 is non-obvious for the reasons

explained above, Claim 34 is also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitation: “wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.” Therefore, Claim 34 is non-obvious in view of this additional limitation that is missing from Von Bauer and Menard.

15. New Dependent Claims 35 – 37 (Regarding Storage)

Claims 35 – 37 depend from Claim 1. Because Claim 1 is non-obvious for the reasons explained above, Claims 35 - 37 are also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitations: (Claim 35) “wherein the stored video and audio communications are accessible by an additional device apart from the control unit;” (Claim 36) “wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime;” (Claim 37) “wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.” Therefore, each of Claims 35 - 37 is non-obvious in view of the additional limitation that is missing from Von Bauer and Menard.

16. New Independent Claim 38

New Independent Claim 38 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 38. In addition, Claim 38 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard.

Neither Von Bauer nor Menard discloses a control unit (as earlier claimed) “comprising a control panel, an alarm system interface, a microcontroller, and a video monitor

communicatively coupled to the microcontroller.” In addition, Neither Von Bauer nor Menard disclose at least the following additional limitations: [1] “wherein the entry point visual and audio communications are wirelessly streamed to the control unit;” [2] “wherein the control unit is capable of displaying the entry point visual and audio communications on the video monitor;” [3] “wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit; [4] “wherein the control panel is capable of allowing an individual to manage a security system; wherein the alarm system interface of the control panel is capable of interfacing with the security system;” [5] “wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed;” and [6] “wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.” Therefore, Claim 38 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

18. New Dependent Claim 39

Claim 39 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 39 is also non-obvious.

17. New Dependent Claim 40

Claim 40 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 40 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitation: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point.” Therefore, Claim 40 is non-obvious in view of this additional limitation that is missing from Von Bauer and Menard.

18. New Dependent Claims 41 – 44

Each of Claim 41 - 42 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, each of these Claims is also non-obvious. Claim 43 depends from Claim 42. Because Claim 42 is non-obvious for the reasons explained above, Claim 43 is also non-obvious.

In addition, Claim 44 depends from Claim 42. Because Claim 42 is non-obvious for the reasons explained above, Claim 44 is also non-obvious. Furthermore, neither Von Bauer or Menard teaches the limitations: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;” “wherein the doorbell monitoring system comprises an alarm system interface; and wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.”

Therefore, Claims 41 – 44 are non-obvious in view of these additional limitations that are missing from Von Bauer and Menard.

19. New Dependent Claim 45

Claim 45 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 45 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the following limitations: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 45 is non-obvious in view of these additional limitations that are missing from Von Bauer and Menard.

20. New Dependent Claim 46

Claim 46 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claim 46 is also non-obvious. In addition, neither Von Bauer or Menard teaches the following limitations: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 46 is non-obvious in view of these additional limitations that are missing from Von Bauer and Menard.

20. New Dependent Claims 47 – 48

Each of Claims 47 – 48 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claims 47 - 48 are each also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitations recited by these claims. Therefore, each of Claims 47 and 48 is non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

21. New Dependent Claim 49

Claims 49 depends from Claim 38. Because Claim 38 is non-obvious for the reasons explained above, Claims 49 is also non-obvious.

22 New Dependent Claim 50

Claims 50 depends from Claim 49. Because Claim 49 is non-obvious for the reasons

explained above, Claims 50 is also non-obvious.

23. New Dependent Claims 51 – 54 (Re. Storage)

Claims 51 – 54 each depend from claim 38. Because Claim 38 is non-obvious for the reasons explained above, each of Claims 51 – 54 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitations recited by these claims. Therefore, each of Claims 51 – 54 is non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

24. New Independent Claim 55

New Independent Claim 55 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 55. In addition, Claim 55 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: [1] “wherein the entry point visual and audio communications are wirelessly streamed to the control unit;” [2] “wherein the control unit is capable of storing the entry point visual and audio communications captured by the communications unit in a data storage unit of the control unit;” [3] “wherein the control panel is capable of allowing an individual to manage a security system;” [4] “wherein an alarm system interface of the control panel is capable of interfacing with the security system;” [5] “wherein the control unit is capable of receiving the entry point visual and audio communications captured by the communications unit before actuation of the proximity detector located in the doorway or if the doorbell is pressed;” and [6] “wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.” Therefore, Claim 55 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

25. New Dependent Claims 56 – 58

Claims 56 – 58 each depend from claim 55. Because Claim 55 is non-obvious for the reasons explained above, each of Claims 56 – 58 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitation recited by Claim 57. Therefore, Claims 57 is also non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

26. New Dependent Claim 59

Claims 59 depends from Claim 58. Because Claim 58 is non-obvious for the reasons explained above, Claims 59 is also non-obvious.

27. New Dependent Claim 60

Claims 60 depends from Claim 58. Because Claim 58 is non-obvious for the reasons explained above, Claims 60 is also non-obvious. In addition, Claim 60 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;” “wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.” Therefore, Claim 60 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

28. New Dependent Claims 61 - 62

Claim 61 depends from Claim 55. Claim 62 depends from Claim 61. Because Claim 55 is non-obvious for the reasons explained above, Claims 61 and 62 are also non-obvious.

29. New Dependent Claim 63

Claim 63 depends from Claim 55. Because Claim 55 is non-obvious for the reasons explained above, Claim 63 is also non-obvious. In addition, Claim 63 includes at least the

following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 63 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

30. New Dependent Claim 64

Claim 64 depends from Claim 55. Because Claim 55 is non-obvious for the reasons explained above, Claim 64 is also non-obvious. In addition, Claim 64 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 64 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

31. New Dependent Claims 65 - 68

Claims 65 – 67 each depends from Claim 55. Claim 68 depends from Claim 67. Because Claim 55 is non-obvious for the reasons explained above, Claims 65 – 68 are also non-obvious.

In addition, Claim 65 – 66 each add a limitation that is not found in the combination of

Von Bauer and Menard. Therefore, each of Claims 65 – 66 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

32. New Dependent Claims 69 – 72 (Re. Storage)

Each of Claims 69 – 72 each depends from Claim 55. Because Claim 55 is non-obvious for the reasons explained above, Claims 69 - 72 are also non-obvious. In addition, Claim 69 - 72 each add a limitation that is not found in the combination of Von Bauer and Menard. Therefore, each of Claims 69 – 72 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

33. New Independent Claim 73

New Independent Claim 73 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 73.

In addition, Claim 73 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: [1] the control unit comprising a control panel, an alarm system interface, a microcontroller, data storage unit and a video monitor communicatively coupled to the microcontroller; [2] wherein the entry point visual and audio communications are wirelessly streamed to the control unit; [3] wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit; [4] wherein the alarm system interface of the control panel is capable of interfacing with a security system; [5] wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed; and [6] wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system. Therefore,

Claim 73 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

34. New Dependent Claims 74 – 77

Each of Claims 74 - 77 depend from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claims 74 - 77 are also non-obvious.

In addition, Claim 74 each add a limitation that is not found in the combination of Von Bauer and Menard. Claims 74 adds “wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and *wirelessly stream* the captured entry point visual and audio communications data to the control unit.” Claim 75 adds “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point.” Claim 76 adds “wherein the single communications unit is *configured to stream* at least a portion of the *captured* visual and audio communications data.” Therefore, each of Claims 74 - 77 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

35. New Dependent Claims 78 – 79

Each of Claims 78 - 79 each depends from Claim 77. Because Claim 77 is non-obvious for the reasons explained above, Claims 78 – 79 are also non-obvious.

In addition, Claim 79 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event;” “wherein the doorbell monitoring system comprises an alarm system interface; wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.” Therefore, Claim 79 is non-

obvious in view of the additional limitations that are missing from Von Bauer and Menard.

36. New Dependent Claim 80

Claim 80 depends from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claims 80 is also non-obvious.

In addition, Claim 80 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 80 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

37. New Dependent Claim 81

Claim 81 depends from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claims 81 is also non-obvious.

In addition, Claim 81 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 81 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

38. New Dependent Claims 82 – 83

Each of Claims 82 - 83 each depends from Claim 73. Because Claim 73 is non-obvious for the reasons explained above, Claims 82 - 83 are also non-obvious. In addition, Claim 82 – 83 each add a limitation that is not found in the combination of Von Bauer and Menard. Therefore, each of Claims 82 – 83 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

39. New Independent Claims 84 – 85

Each of Claim 84 depends from Claim 73 and Claim 85 depends from Claim 84. Because Claim 73 is non-obvious for the reasons explained above, Claims 84 - 85 are also non-obvious.

40. New Dependent Claims 86 – 89 (Re. Storage)

Claims 86 - 89 each depend from claim 73. Because Claim 73 is non-obvious for the reasons explained above, each of Claims 86 – 89 is also non-obvious. In addition, neither Von Bauer nor Menard teaches the limitations recited by these claims. Therefore, each of Claims 86 – 89 is non-obvious in view of the additional limitation added that is missing from Von Bauer and Menard.

41. New Dependent Claim 90

New Independent Claim 90 is an apparatus claim wherein the first six limitations are the original limitations found in Claim 1 as issued. As explained above, original Claim 1 is patentable over the combination of Von Bauer and Menard. Therefore, so is Claim 90.

In addition, Claim 90 includes at least the following additional limitations that are not found in the combination of Von Bauer and Menard: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;” and

“wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed.” Therefore, Claim 90 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

42. New Dependent Claim 91

Claim 91 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 91 is also non-obvious.

43. New Dependent Claim 92

Claim 92 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 92 is also non-obvious.

In addition, Claim 92 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications data.” Therefore, Claim 92 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

43. New Dependent Claims 93 - 94

Claim 93 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 93 is also non-obvious. Claim 94 depends from Claim 93. Because Claim 90 is non-obvious for the reasons explained above, Claims 94 is also non-obvious.

44. New Dependent Claim 95

Claim 95 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 95 is also non-obvious.

In addition, Claim 95 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell is capable of recording visual and audio

communications before any type of triggering event; wherein the doorbell is also capable of wirelessly streaming video communications after detection by the proximity detector; wherein the doorbell monitoring system comprises an alarm system interface; wherein the doorbell monitoring system employs one or more offsite servers to facilitate communications between the cellular telephone, the control unit, and the single communications unit after a triggering event.” Therefore, Claim 95 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

45. New Dependent Claims 96 - 97

Claims 96 depends from Claim 90. Claim 97 depends from Claim 96. Because Claim 90 is non-obvious for the reasons explained above, Claims 96 and 97 are also non-obvious.

46. New Dependent Claim 98

Claim 98 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 98 is also non-obvious.

In addition, Claim 98 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Therefore, Claim 98 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

47. New Dependent Claim 99

Claim 99 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 99 is also non-obvious.

In addition, Claim 99 adds the following limitations that are not found in the combination

of Von Bauer and Menard: “wherein the doorbell monitoring system is capable of authenticating a user of the system wherein the doorbell is capable of recording video and audio before any type of triggering event;” “wherein the doorbell and the control panel are capable of communicating via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone;” and “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 99 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

48. New Dependent Claim 100

Claim 100 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 100 is also non-obvious.

In addition, Claim 100 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.” Therefore, Claim 100 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

48. New Dependent Claim 101

Claim 101 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 101 is also non-obvious.

In addition, Claim 101 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at

least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.” Therefore, Claim 100 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

49. New Dependent Claim 102

Claim 102 depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claim 102 is also non-obvious.

In addition, Claim 102 adds the following limitations that are not found in the combination of Von Bauer and Menard: “wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.” Therefore, Claim 102 is non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

49. New Dependent Claims 103 and 104

Claim 103 depends from Claim 90. Claim 104 depends from Claim 103. Because Claim 90 is non-obvious for the reasons explained above, Claims 103 and 104 are also non-obvious.

50. New Claims 105 – 108 (Re. Storage)

Each of Claims 105 - 108 each depends from Claim 90. Because Claim 90 is non-obvious for the reasons explained above, Claims 105 - 108 are also non-obvious. In addition, Claim 105 – 108 each add a limitation that is not found in the combination of Von Bauer and Menard. Therefore, each of Claims 105 – 108 are non-obvious in view of the additional limitations that are missing from Von Bauer and Menard.

51. New Dependent Claim 109

Claim 109 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 109 is also non-obvious.

52. New Dependent Claim 110

Claim 110 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claims 110 is also non-obvious.

53. New Dependent Claim 111

Claim 111 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claims 111 is also non-obvious. In addition, Claim 111 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit *comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.*” (emphasis added). Therefore, Claim 111 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

54. New Dependent Claim 112

Claim 112 depends from Claim 111. Because Claim 111 is non-obvious for the reasons explained above, Claims 112 is also non-obvious. In addition, Claim 112 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: recording video after the proximity detector is triggered and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” Therefore, Claim 112 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

55. New Dependent Claim 113

Claim 113 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 113 is also non-obvious. In addition, Claim 113 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 113 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

56. New Dependent Claim 114

Claim 114 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 114 is also non-obvious. In addition, Claim 114 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: providing an interface on the cellular phone that provides an option to request further image or video data.” Therefore, Claim 114 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

57. New Dependent Claim 115

Claim 115 depends from Claim 8. Because Claim 8 is non-obvious for the reasons explained above, Claim 115 is also non-obvious. In addition, Claim 115 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “further comprising: providing an interface that provides an option to notify an alarm company.” Therefore, Claim 115 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

58. New Independent Claim 116

New Independent Claim 116 is a method claim wherein the first seven limitations are the

original limitations found in Claim 8 as issued. As explained above, original Claim 8 is patentable over the combination of Von Bauer, Menard, and Klein. Therefore, so is Claim 116. In addition, Claim 116 includes at least the following additional limitations that are not found in the combination of Von Bauer, Menard, and Klein.

Neither Von Bauer, Menard, nor Klein disclose: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;” “receiving at a control unit a request to send additional information regarding an event associated with the doorbell;” “wirelessly streaming video communications from the single communications unit before the proximity detector is actuated;” and “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone.”

Therefore, Claim 116 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

59. New Dependent Claim 117

Claim 117 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 117 is also non-obvious. In addition, Claim 117 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “rendering a menu option that when selected would take no action based upon an actuation of a security system.” Therefore, Claim 117 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

60. New Dependent Claim 118

Claim 118 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 118 is also non-obvious.

59. New Dependent Claim 119

Claim 119 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 119 is also non-obvious. In addition, Claim 119 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 119 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

60. New Dependent Claim 120

Claim 120 depends from Claim 119. Because Claim 119 is non-obvious for the reasons explained above, Claim 120 is also non-obvious. In addition, Claim 120 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “recording video after the proximity detector is triggered; sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” Therefore, Claim 120 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

61. New Dependent Claim 121

Claim 121 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 121 is also non-obvious. In addition, Claim 121 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 121 is non-obvious in view

of the additional limitations that are missing from Von Bauer, Menard, and Klein.

62. New Dependent Claim 122

Claim 122 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 122 is also non-obvious.

63. New Dependent Claim 123

Claim 123 depends from Claim 116. Because Claim 116 is non-obvious for the reasons explained above, Claim 123 is also non-obvious. In addition, Claim 123 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “providing an interface that provides an option to notify an alarm company.” Therefore, Claim 123 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

64. New Independent Claim 124

New Independent Claim 124 is a method claim wherein the first seven limitations are the original limitations found in Claim 8 as issued. As explained above, Claim 8 is patentable over the combination of Von Bauer, Menard, and Klein. Therefore, so is Claim 124.

In addition, Claim 124 includes at least the following additional limitations that are not found in the combination of Von Bauer, Menard, and Klein. Neither Von Bauer, Menard, nor Klein disclose: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;” “sending from a control unit additional information regarding an event associated with the doorbell;” “notifying a home security company when an emergency event occurs at the entry point;” “wirelessly streaming video communications before the proximity detector is actuated;” and “wirelessly streaming video communications after the proximity detector is actuated.”

Therefore, Claim 124 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

65. New Dependent Claim 125

Claim 125 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 125 is also non-obvious. In addition, Claim 125 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “rendering a menu option that when selected would take no action based upon an actuation of a security system.” Therefore, Claim 125 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

66. New Dependent Claim 126

Claim 126 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claims 126 is also non-obvious.

67. New Dependent Claim 127

Claim 127 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claims 127 is also non-obvious. In addition, Claim 127 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 127 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

68. New Dependent Claim 128

Claim 128 depends from Claim 127. Because Claim 127 is non-obvious for the reasons explained above, Claim 128 is also non-obvious. In addition, Claim 128 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “recording video after the proximity detector is triggered; and sending the video recorded before and after the triggering of the proximity detector to the cellular phone.” Therefore, Claim 128 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

69. New Dependent Claim 129

Claim 129 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 129 is also non-obvious. In addition, Claim 129 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller.” Therefore, Claim 129 is non-obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

70. New Dependent Claim 130

Claim 130 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 130 is also non-obvious.

71. New Dependent Claim 131

Claim 131 depends from Claim 124. Because Claim 124 is non-obvious for the reasons explained above, Claim 131 is also non-obvious. In addition, Claim 131 adds the following limitations that are not found in the combination of Von Bauer, Menard, and Klein: “providing an interface that provides an option to notify an alarm company.” Therefore, Claim 131 is non-

obvious in view of the additional limitations that are missing from Von Bauer, Menard, and Klein.

E. Motivation to Combine

There is no need to discuss motivation to combine the references of the combination when together they do not meet all claim limitations. *See generally Rhine v. Casio, Inc.*, 183 F.3d 1342, 1346 (Fed. Cir. 1999) (remanding for further fact-finding including motivation to combine even though court found all limitations present in combination). Because limitations of the Pending Claims are missing from the combinations of SNQ 1 and 2, there is no need to discuss the motivation to combine. Nevertheless, Patent Owner disputes that a person of ordinary skill in the art (“POSA”) would have been motivated to combine either (1) Von Bauer and Menard or (2) Von Bauer, Menard, and Klein.

In light of the amendments herein and the explanations set forth above, Patent Owner requests that the Pending Claims be allowed. To the extent that the Pending Claims are not considered to be in condition for allowance, Patent Owner hereby requests an interview regarding the Pending Claims in order to expedite allowance of same. Patent Owner respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at kirby@kirbydrakelaw.com.

Respectfully submitted,

Date: November 11, 2024

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EXAMINER

ESCALANTE, OVIDIO

ART UNIT	PAPER NUMBER
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04/18/2025

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action in Ex Parte Reexamination	Control No. 90/019,542	Patent Under Reexamination 7583191	
	Examiner OVIDIO ESCALANTE	Art Unit 3992	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

- a. ☒ Responsive to the communication(s) filed on 11 November 2024.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- b. ☐ This action is made FINAL.
- c. ☐ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c)**. If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. ☒ Notice of References Cited by Examiner, PTO-892. | 3. ☐ Interview Summary, PTO-474. |
| 2. ☒ Information Disclosure Statement, PTO/SB/08. | 4. ☐ _____. |

Part II SUMMARY OF ACTION

- 1a. ☒ Claims 1,8,19 and 21-131 are subject to reexamination.
- 1b. ☒ Claims 2-7,9-13,15-18 and 20 are not subject to reexamination.
2. ☒ Claims 14 have been canceled in the present reexamination proceeding.
3. ☐ Claims _____ are patentable and/or confirmed.
4. ☒ Claims 1,8,19 and 21-131 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
1 ☐ been received.
2 ☐ not been received.
3 ☐ been filed in Application No. _____.
4 ☐ been filed in reexamination Control No. _____.
5 ☐ been received by the International Bureau in PCT application No. _____.
* See the attached detailed Office action for a list of the certified copies not received.
9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.
10. ☐ Other: _____

cc: Requester (if third party requester)

DETAILED ACTION

1. This office action is in response to the Request for Reexamination filed on June 19, 2024, the Examiner's Order filed on September 26, 2024 which granted *ex parte* reexamination of claims 1, 8, 14 and 19 and the Patent Owner's Statement filed on November 11, 2024.

2. As set forth in the Patent Owner's statement, claims 1 and 8 have been amended, claim 14 has been canceled and new claims 21-131 are presented.

Status of the Claims

3. Original claim 19 is rejected.

Original claim 14 is canceled.

Amended original claims 1 and 8 are rejected.

New claims 21-131 are rejected.

Original claims 2-7, 9-13, 15-18 and 20 are not subject to reexamination.

Claim Interpretation

4. As per MPEP 2258(G), Original patent claims will be examined only on the basis of prior art patents or printed publications applied under the appropriate parts of 35 U.S.C. 102 and 103 in reexaminations ordered under 35 U.S.C. 304. See MPEP § 2217. During reexamination ordered under 35 U.S.C. 304, and also during reexamination ordered under 35 U.S.C. 257, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims (*In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984)). In a reexamination proceeding involving claims of an expired patent, claim construction pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim "are generally given their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention) should be applied since the expired claim are not subject to amendment. See *Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter. 1986). The statutory presumption of validity, 35 U.S.C. 282, has no application in reexamination (*In re Etter*, 756 F.2d 852, 225 USPQ 1 (Fed. Cir. 1985)).

Information Disclosure Statement

5. With respect to the Information Disclosure Statement submitted on November 11, 2024 the information cited has been considered as described in the MPEP. Note that MPEP 2256 and 2656 indicate that degree of consideration to be given to such information will be normally limited by the degree to which the party filing the information citation has explained the content and relevance of the information. Information that does not appear to be "patents or printed publications" as identified in 35 U.S.C. 301 have been considered to the same extent (unless otherwise noted), but have been lined through and will not be printed on any resulting reexamination certificate.

Patent Owner's Statement

Claim 1:

The Patent Owner states that Menard does not disclose a doorbell monitoring system but rather a surveillance system.

The Examiner finds that Menard discloses a module that includes a plurality of different sensors including a video camera and a doorbell. Menard is specifically directed to detecting and monitoring an event or condition of interest. See the abstract and page 20, lines 13-27 which discloses that the module 200D operates in the same way as a doorbell. Therefore, in at least one embodiment, Menard is directed to a doorbell monitoring system.

The Patent Owner states that amended claim 1 recites "a cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit." The Patent Owner states that while Menard shows as one embodiment an "exterior module 200D" that directly communicates with a cell phone over link 220A, it does not show cellular communications "to the control unit."

The Examiner acknowledges that in one embodiment, Menard discloses that the module directly communicates with a cellphone over link 220; however, Menard also discloses that messages from the module to the PDU 400 can be made indirectly, via LD comm module 250A. Menard states that when the user is outside the residence, and indirect link, including link 225 coupling the LD comm module

250A to the PDU 400 may be employed. See page 20, lines 13-28. Thus, the module 200 via link 205 to the LD comm module and via link 225 from the LD comm module to the device of the user results in communication via cellular communications from the PDU 400 (cellular telephone) and the control unit (LD comm module).

As explained on page 21, lines 11-28, Menard discloses of bi-directional communication between the ‘arrival of a caller’ at the module 200D (with doorbell and video camera) and the user at PDU 400. When considered in light of the previous citation, this communication can also occur via the comm module. See page 20, lines 13-28. The use of either link 220 or 225 (from the LD comm module) depends on the location of the PDU 400.

Therefore, the Examiner does not find the Patent Owner’s argument persuasive and maintains that Menard does show cellular communications to a control unit (LD comm module).

The Examiner notes that the Patent Owner’s statement includes a footnote on page 66 of their response acknowledging cellular telephone communications via LD communication module 250. However, the Patent Owner states that Menard does not make clear the full functionality of that module and that the “LD communication module 250 does not meet the definition of a “control unit” and therefore not a control unit as contemplated by the Pending Claims in this Amendment and Response.”

The Examiner notes that it is not clear how ‘control unit’ is defined over Menard nor is it clear what specific functionally the Patent Owner maintains is not included in the definition of ‘control unit’. Therefore, these statements are not persuasive.

Amended Limitations in Claim 1:

The Patent Owner states that the limitation “the control unit comprising... alarm system interface... and a video monitor” is not shown in von Bauer and Menard does not teach a video monitoring nor a “microcontroller”.

With respect to von Bauer, the Examiner finds that its control unit, does not specifically disclose an alarm system interface. In addition, although von Bauer discloses of a video monitor, the video

monitor is not part of the control unit (it is a separate entity) and thus the control unit of Von Bauer does not comprise a video monitor.

With respect to Menard, the Examiner finds that Menard discloses that its base 250 includes LD comm module as well as user operable controls and display to enable programming an operation of the system. See page 20, lines 6-8. In addition, Menard discloses that the base 250A includes security system components (alarm system interface). See page 23, lines 13-19.

With respect to the “video monitor”, the Examiner finds that although, the base 250A includes a display, Menard does not specifically disclose whether this display is a “video monitor”. In addition, although the Examiner maintains that a person of ordinary skill in the art would have understood that the LD comm module would have a processing means, Menard does not specifically disclose that its LD comm module includes a video monitor communicatively coupled to a microcontroller”.

The Patent Owner states that neither von Bauer nor Menard teach playing a “pre-recorded message.”

The Examiner agrees with the Patent Owner that neither von Bauer nor Menard disclose playing a pre-recorded message to a visitor at the claimed single communication unit.

The Patent Owner further states that claim 1 was further amended to recite “wherein the control unit is capable of receiving audio communications from the cellular telephone”.

The Examiner notes that as explained above, Menard discloses of audio communication over a cellular network when the PDU 400 is located outside of the residence and connected to the module via the LD comm module. See page 20, lines 13-28 and page 21, line 11-28.

Claim 8

As amended, the Patent Owner states that none of the references teach “wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit.”

The Examiner notes that as explained above (and in consideration of fn. 2 as referenced by the Patent Owner), Menard discloses of wirelessly streaming visual and audio communication via the control unit.

The Patent Owner further states that Menard does not teach “receiving at the control unit a request to send additional information regarding an event associated with the doorbell”, “notifying a home security company when an emergence even occurs at the entry point” and “authenticating a homeowner before rendering at least a portion of the capture visual and audio communications at the cellular phone.”

The Examiner notes that although Menard discloses of a security system it is agreed that the combination of the above cited limitations are not disclosed by von Bauer, Menard or Klein.

Claim 19

The Patent Owner states that Menard does not disclose at least” (1) “a control unit....for communicating the received cellular audio communication to the external speaker” and (2) “a cellular telephone...transmitting the cellular audio communications to the control unit.”

The Patent Owner states that while Menard shows as one embodiment an “exterior module 200D” that directly communicates with a cell phone over link 220A, it does not show cellular communications “to the control unit.”

As set forth above with respect to claim 1, the Examiner disagrees. As set forth above, the Examiner notes that the module 200 may indirectly communicate with the PDU via LD comm module 250A through link 225 (cellular link) for the transmission of video/audio data. This link is used in one embodiment when the user is located outside of the residence.

Thus, when the use is outside the residence, Menard discloses cellular communication to the control unit via cellular link 225.

Thus, the Examiner does not find the Patent Owner’s arguments persuasive.

Claim 38:

The Patent Owner states that neither von Bauer nor Menard discloses at least the following limitations: [1] “wherein the entry point visual and audio communication are wirelessly streamed to the control unit;” [2] “wherein the control unit is capable of displaying the entry point visual and audio communication on the video monitor;” [3] “wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit; [4] “wherein the control panel is capable of allowing an individual to manage a security system; wherein the alarm system interface of the control panel is capable of interfacing with the security system;” [5] “wherein the control unit is capable of receiving the entry point visual and audio communication before actuation of the proximity detector located in the doorway or if the doorbell is pressed;” and [6] “wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event”.

The Examiner notes that Menard disclose of wirelessly streaming visual and audio communication to the control unit as well as including a security system with the LD comm module.

The Examiner agrees with the Patent Owner that that the combination of von Bauer and Menard does not teach each of the above identified limitations in combination.

Claim 55:

The Patent Owner states that Claim 55 includes at least the following additional limitations that are not found in the combination of von Bauer and Menard: [1] “wherein the entry point visual and audio communications are wirelessly streamed to the control unit;” [2] “wherein the control unit is capable of storing the entry point visual and audio communications captured by the communications unit in a data storage unit of the control unit;” [3] “wherein the control panel is capable of allowing an individual to manage a security system;” [4] “wherein an alarm system interface of the control panel is capable of interfacing with the security system;” [5] “wherein the control unit is capable of receiving the entry point visual and audio communications captured by the communications unit before actuation of the proximity detector located in the doorway or if the doorbell is pressed;” and [6] “wherein the doorbell monitoring system is capable of authenticating a user of the doorbell monitoring system.”

The Examiner notes that while Menard disclose of wirelessly streaming visual and audio communication to the control unit as well as including a security system with the LD comm module, the Examiner agrees with the Patent Owner that that the combination of von Bauer and Menard does not teach each of the above identified limitations in combination.

Claim 73:

The Patent Owner states that Claim 73 includes at least the following additional limitations that are not found in the combination of von Bauer and Menard: [1] the control unit comprising a control panel, an alarm system interface, a microcontroller, data storage unit and a video monitor communicatively coupled to the microcontroller; [2] wherein the entry point visual and audio communications are wirelessly streamed to the control unit; [3] wherein the control unit is capable of storing the entry point visual and audio communications in a data storage unit of the control unit; [4] wherein the alarm system interface of the control panel is capable of interfacing with a security system; [5] wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed; and [6] wherein a menu of options is provided to the user and at least one of the options are capable of being activated using a voice activation system.

The Examiner notes that while Menard disclose of wirelessly streaming visual and audio communication to the control unit as well as including a security system with the LD comm module, the Examiner agrees with the Patent Owner that that the combination of von Bauer and Menard does not teach each of the above identified limitations in combination.

Claim 90:

The Patent Owner states Claim 90 includes at least the following additional limitations that are not found in the combination of von Bauer and Menard: “wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit,” and “wherein the control

unit is capable of receiving the entry point visual and audio communications before actuation of a proximity detector located in the doorway or if the doorbell is pressed.”

The Examiner agrees with the Patent Owner that that the combination of von Bauer and Menard does not teach each of the above identified limitations in combination.

Claim 116:

The Patent Owner states neither von Bauer, Menard, nor Klein disclose: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set ” within a predetermined range of detection,” “receiving at a control unit a request to send additional information regarding an event associated with the doorbell;” “wirelessly streaming video communications from the single communications unit before the proximity detector is actuated;” and “authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone.”

The Examiner agrees with the Patent Owner that that the combination of von Bauer and Menard does not teach each of the above identified limitations in combination.

Claim 124:

The Patent Owner states neither von Bauer, Menard, nor Klein disclose: “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection;” “sending from a control unit additional information regarding an event associated with the doorbell;” “notifying a home security company when an emergency event occurs at the entry point;” “wirelessly streaming video communications before the proximity detector is actuated;” and “wirelessly streaming video communications after the proximity detector is actuated.”

The Examiner agrees with the Patent Owner that that the combination of von Bauer and Menard does not teach each of the above identified limitations in combination.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 8 and 21-131 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for applications subject to pre-AIA 35 U.S.C. 112, the inventor(s), at the time the application was filed, had possession of the claimed invention.

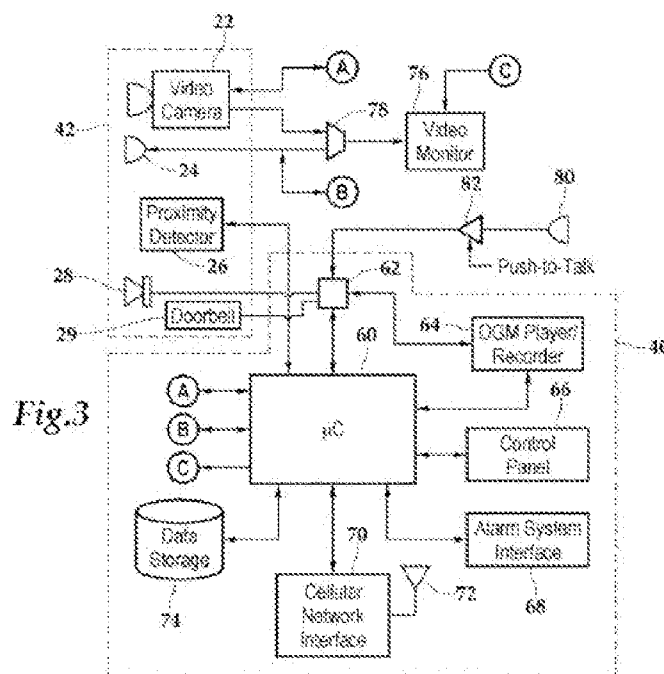
A. **Claim 1** recites “the control unit comprising... a video monitor communicatively coupled to the microcontroller” (emphasis added). See also **claims 38, 73, 111, 113, 119, 121, 127 and 129** which each recite a similar limitation.

The Patent Owner cites to col. 5, lines 7-16 for support. The Examiner notes that this citation states:

“Further, the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74. Additionally, components, which are not illustrated as part of the communications unit 42, are connected to the microcontroller 60. A video monitor 76 is coupled to the microcontroller 60 as well as to the video camera 22 and the exterior microphone 24 through a multiplexer 78.”

This citation shows that the video monitor is not a component of the control unit but is connected to the microcontroller 60 through a multiplexer 78. Indeed, other components are also connected to the microcontroller through the multiplexer including several components of the doorbell. The Examiner does not consider the control unit to “comprise” the doorbell nor the video monitor, rather, an external video monitor is coupled to the microcontroller through the multiplexer in the same manner as an external doorbell is coupled to the microcontroller through a multiplexer.

Indeed, in view of Figure 3, it is clear that the video monitor is not part of the control unit. See below Figure 3 of the ‘191 Patent which shows that the Video Monitor 76 is external to the control unit 40.



Therefore, the citations referenced by the Patent Owner do not specifically, disclose that the control unit comprises a video monitor.

In view of the above issue, the Examiner maintains that **Claims 1, 21-54, 73-89, 111, 113, 119-121, 127 and 128** are rejected for either for being dependent upon a base claim with this issue or for including a limitation with this issue.

B. Regarding **claim 8**, the claim recites “a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera”.

The Patent Owner cites to col. 2, lines 35-44 and col. 4, lines 51-56 for support. The Examiner notes that although these citations show the initiation of a communication in response actuation of a proximity detector, it does not disclose any range associated with respect to a proximity detector or that it is less than an entire field of view of a camera.

The Examiner notes that the Patent Owner states that a POSA would understand that a proximity detector would be set within a predetermined range of detection. The Examiner disagrees in part. It is agreed that a proximity sensor would have a predetermined range as understood by a person of ordinary skill in the art, however, the claim recites “when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera”.

The Examiner finds that the specification and the Patent Owner’s citations do not disclose of the setting of any range for detecting a visitor within the proximity detector’s range. The Examiner further finds that the inherency statement by the Patent Owner does not address the full limitation. As set forth above, both a range of a proximity sensor along with that range being less than an entire field of view of a camera is claimed. There is neither range of a proximity detector provided in the Patent Owner’s citations nor any discussion of the field of view of a camera.

Thus, there is no support for showing that “when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera” as claimed.

In addition, **claims 116 and 124** each recite “when a visitor is detected via a proximity detector that is set within a predetermined range of detection”. Similar to the above discussion, there is no setting of a predetermined range within a range of a proximity detector disclosed in the patent specification. As explained above, the Examiner acknowledges that a proximity detector would have a range, however, the claim limitation is directed to a proximity detector that is set within a predetermined range of detection. There is no disclosure which discloses how a range is set within a predetermined range of detection.

In view of the above issue, the Examiner maintains that **Claims 8 and 109-131** are rejected for either for being dependent upon a base claim with this issue or for including a limitation with this issue.

C.1 Claim 8 also recites “sending video communications before the proximity detector is actuated”. Similarly, **claim 38** recites, “wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed”. It is also noted that claims **40, 41, 55, 57, 73, 75, 76, 90, 92, 112, 116, 120, 124, 128** each recite similar limitations.

The Patent Owner cites to col. 3, lines 1-8, which states that the video camera may be motion activated and begin recording video in response to actuation of any type of entryway to any time of properly or structure. The citation also states that the video camera can collect video irrespective of the occurrence of the trigger event. The Examiner notes that the only explicit ‘triggering event’ is the ringing of a doorbell provided in this citation. The triggering event is not explicit with respect to either motion detection or proximity detection or that visual and audio is received by the control unit at least before actuation of the proximity detector.

Thus, the Examiner acknowledges that that the video cameras can record before the ringing of the doorbell however, this does not show whether a camera (or video and audio communications) is sent prior to the activation of the proximity detector as claimed. In addition, the col. 3, lines 1-8 citation shows that it activates in response to actuation of any type of entryway. This does not show any correlation as to whether visual and audio communication are received by the control unit “before actuation of the proximity detector”.

In addition, with reference to col. 6, lines 21-24 as cited by the Patent Owner, this citation shows that the proximity detector actuates at block 112 and at block 114, the video camera and exterior microphone to begin capturing visual and audio data in response to actuation of the proximity detector .

The Examiner further notes that this citation shows that “[t]his operation may occur substantially simultaneously with or even prior to operations of block 114”. The Examiner notes that this citation does

not show whether it occurs before block 112 (actuation of proximity detector) only that it occurs prior to block 114. See also Figure 5 which also does not show any reception of visual and audio data prior to the actuation of a proximity detector. .

Thus, the '191 Patent does not provide clear support for sending video and audio communications before the proximity detector is activated.

C.2 In addition, the Examiner notes that **claim 8** recites "ringing of a doorbell at an entry point; responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point; relaying at least a portion of the captured visual and audio communications to a cellular phone".

The newly added limitations subsequently recites "sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera", then "sending video communications before the proximity detector is actuated".

The '191 patent does not show where visual and audio communication are captured in response to the ringing of a doorbell, as required by the claim, then send a notification when a visitor is detected via a proximity detector and then have audio and visual communication be received by the control unit before the proximity detector is actuated". That is, there is no clear single embodiment which recites each one of the three events in combination.

The Examiner notes that the sending of visual and audio communications in response to the ringing of a doorbell, then the sending of a [further] communication to a cell phone when a proximity detector detects a visitor, and then the sending of video and audio communications before the proximity detector is actuated (the Examiner notes that **claims 38, 55, 73 and 90** recite receiving visual and audio communication before the actuation of the proximity detector or the doorbell-thus in addition, to visual there is no clear support for the transmission of audio prior to the activation of either the proximity detector or the doorbell) is not supported by the '191 Patent.

In another example, the Examiner acknowledges that a doorbell can be the cause of visual and audio communications to be received by the doorbell as well as the actuation of a proximity detector and

an actuation of a video camera. However, the specification does not disclose that once one of these three gets activated, e.g., the video camera gets activated before proximity actuation (as explained above, this is not clearly disclosed in the specification) then visual and audio communications is received by the control unit, then the trigger of the doorbell will also cause audio and video to be received by the control unit. The actuation of the video camera is already sending audio and video and there is no teaching that once the camera causes audio and video to be sent that a doorbell would be the cause of also sending audio and video to the control unit after actuation. Rather, the specification only discloses a single trigger for causing audio and video to be received by the control unit and provides no support for a second trigger to send audio and video communications when the visitor approaches the door (i.e. with the initial sending of audio and visual communications).

C.3 The Examiner also finds that **claims 24, 28, 44, 46, 60, 64, 79, 81, 95, and 99** each recite “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event.” With reference to col. 6, lines 21-24, the Examiner finds that the specification is not clear as to what is “any type” when the only disclosed triggering event that it could start recording beforehand is in response to a actuation of a doorbell. The teachings of recording visual and audio before “any type of triggering event” is not disclosed. It addition, it could be considered that proximity and motion are other types, but if this is the case, the specification does not disclose sending visual and audio communications before the detection of “any type” of triggering event.

The Examiner finds that there is always a trigger event whether it be motion, proximity, or actuation of a button which causes audio and video to be recorded/transmitted/received. Since the independent claims already recite sending visual and audio in response to a doorbell, then as explained above, the specification does not describe that in this same embodiment, that a separate event occurring prior to the doorbell actuation this will also trigger the sending of audio and visual communication while also allowing the triggering of the doorbell to send audio and video communications as a separate event.

In view of the above issues (C.1, C.2 and C.3), the Examiner maintains that **Claims 8, 24, 28, 38, 44, 46, 47, 60, 64, 79, 81, 99 and 109-115** are rejected for either for being dependent upon a base claim with this issue or for including a limitation with this issue.

D. Regarding **claim 21**, the claim recites “wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event”. The claim further states “responsive to the second triggering event, capture entry point visual and audio communication at the entry point and wirelessly stream the captured entry point....”. This same issue is present in **claims 39, 56, 74, 91**.

The Examiner notes that *claim 1* already recites that the doorbell is a triggering event and that responsive to the triggering event capturing and transmitting the captured visual and audio communication.

When considering claim 21, the claim then recites that it is the proximity detector that triggers the capturing of visual and audio communications. The specification does not disclose that in addition, to the actuation of the doorbell causing visual and audio communications to be recorded as well as being transmitted that a proximity detector can also have the same effect that occurs--that is, that two separate visual and audio communication events occur in the same embodiment or flow process. The combination of claims 1 and 21 required two separate events that both cause the visual and audio to be recorded and transmitted. For example, the citations provided by the Patent Owner and the patent specification do not show where the combination of a proximity detector causing visual and audio to be recorded and transmitted is subsequently followed with the triggering of a doorbell also causes visual and audio also be subsequently recorded and transmitted. Rather, any one of these two individually, cause the transmission of audio and visual data. There is no teaching as to what occurs if e.g. a proximity sensors causes the sending of audio and visual communication and then a visitor subsequently actuates the doorbell.

In view of the above issue, the Examiner maintains that **claims 21, 39, 56, 74, and 91** are rejected.

E. Regarding **claim 23**, the claim recites “capture additional video from the video camera after a second triggering event.” It is noted that claim 22 also recites “capture additional video from the video camera after the triggering event.” Thus, both claims recites capturing additional video from the video camera after the triggering event. The difference is claim 22 does it after **the** triggering event (i.e. after the actuation of the doorbell) and claim 23 does it after a “second triggering event”. This same issue is present in **claims 24, 43, 59, 60, 78, 79, 94, and 95**.

The Patent Owner for support states “This limitation is similar to limitation 21.4 and finds substantially similar support as well.” The Examiner notes that limitation 21.4 cites to col. 2, lines 36-44 which discloses the capturing of visual and audio communication and col. 6, lines 16-21 for also discloses the capturing of visual and audio data. None of these citations refer to both “a triggering event” and a “second triggering event” in combination for capturing of additional visual and audio communications during each triggering event. That is a first triggering event that causes the capturing of additional video and subsequently after this has occurred a second trigger event that causes the capturing of additional video in the same embodiment.

In view of the above issue, the Examiner maintains that **claims 23, 24, 43, 44, 59, 60, 78, 79, 94 and 95** are rejected.

F. Regarding **claim 27**, the claim recites “wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” The Examiner notes that the Patent Owner cites to col. 6, lines 39-55, col. 8, lines 15-18 and col. 6, lines 42-49. This same issue is set forth in **claims 45, 63, 80, and 98**.

Although, these citations disclose of authenticating the identity of a homeowner, there is no teaching of also authenticating of one or more communications related to the doorbell monitoring system.

It is noted that the Patent Owner focuses on “call authentication”, however there is no support for this as being a separate authentication. That is authenticating a homeowner is call authentication (see col. 6, lines 42-49). There is no further authentication of one or more communications other than with the homeowner.

In view of the above issue, the Examiner maintains that **claims 27, 45, 63, 80, and 98** are rejected.

G. Regarding **claim 30**, the claim recites “wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.” The Examiner notes that the Patent Owner cites col. 5, lines 63-65 col. 6, lines 56-67. It is noted that while the citations provide support for a video monitor as well as a menu provided on a cellular telephone, the citation do not show a control panel comprises a graphical user interface or the video monitor (which a control panel comprises) includes a graphical user interface and managing a security system using the graphical user interface. Rather, the citations only show a menu on a cellular telephone. The display of the cellular telephone is not comprised in the control unit. Thus, the ‘191 Patent, while disclosing an individual using the control panel to manage the security system (see col. 5, lines 39-40) does not disclose allowing an individual to manage the alarm system using a graphical user interface of the control panel.

The Examiner notes that the Patent Owner states that “[a] POSA would understand that the traditional video monitor would have a graphical user interface to allow an individual to manage the alarm system. However, even if a POSA would understand that a video monitor would have a graphical user interface, this does not show that the ‘191 supports allowing an individual to manage the alarm system using the graphical user interface.

In addition, **claims 47, 65, 82, and 101** each recite similar limitations and are thus rejected for the same reasons.

H. Regarding **claims 38 and 73**, the claim recites, *inter alia*, “wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime”.

The Examiner notes that the specification does not disclose that the control unit is capable of displaying any communications. Rather, it is an external video monitor (external to the control unit) which is connected to the control unit which is configured to display the communication. Therefore, the Examiner finds that this limitation is not support by the ‘191 patent.

The Patent Owner cites to col. 5, lines 57-60 for support, however this only shows that the video monitor displaying the audio and visual communications, not that the control unit is able to do so.

In view of the above issues, the Examiner maintains that **Claims 38-54 and 73-89** are rejected for similar reasons either for being dependent upon a base claim with this issue or for separately including a limitation with this issue.

8. The following is a quotation of 35 U.S.C. 112(b):
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 24, 27-29, 33, 36, 38, 40, 41, 44-46, 53, 55, 57, 60, 63,64, 68, 71, 73, 75,76,79-81, 85, 88,90,92, 95, 98-100,104 and 107 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor (or for applications subject to pre-AIA 35 U.S.C. 112, the applicant), regards as the invention.

Claims 33, 68, 85 and 104 each recite “wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute

two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.”

The Examiner notes that this claim is not clear since it requires “two or more actions” and as part of the selection “no action” can be selected. In this case, it is not clear how an two or more actions” includes “no action”. The Examiner acknowledges that “no action” may be selected by a user from a menu as set forth in the ‘191 patent, however the claim recites an action, not a ‘no action’ (the Examiner suggests changing no action to be a selection of no action – hence the action includes selection of the no action option).

In addition, it appears that “two or more action” is covered by at least one (that is, can be only one) action. Thus, if at least two actions are covered by “at least one”, then it is not clear how there can be “two actions”.

Claims 1, 24, 27-29, 36, 38, 40, 41, 44-46, 53, 55, 57, 60, 63, 64, 71, 73, 75, 76, 79-81, 88, 90, 92, 95, 98-100 and 107 each recite “capable of”. The Examiner finds that the “capable of” language relates to a future act that may never positively occur and is not recited to exist in the present tense. Thus, since ‘capable of’ may not positively occur, the metes and bounds of the claim is not clear. The Examiner suggests the Patent Owner to use ‘configured to’ as opposed to ‘capable of’.

Claims 35, 52, 70, 87 and 106 recites the limitation "the stored video and audio communications" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

10. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis

(i.e., changing from AIA to pre-AIA) for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1, 21-23, 25, 26, and 29-37 is/are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Sheynman et al. US Patent Pub. 2005/0285734 in view of von Bauer US Patent 5,428,388 and further in view of Hershkovitz US Patent Pub. 2004/0257336.

Regarding claim 1:

A system for providing doorbell monitoring, the system comprising:

Sheynman is directed an intercom system including detecting the presence of a visitor at a visitor monitor, communicating (224) information received at the visitor monitor in association with the visitor detected to a remotely located communications network gateway, communicating (232) the presence of the visitor from the communication network gateway to a remote terminal. See the abstract. In addition, Sheynman discloses that the visitor monitor includes an actuator 113 which is a doorbell or other door ringer. See paragraph [0020]

a doorway to a home having an environment;

As explained in paragraph [0019], Sheynman discloses that the visitor monitor is located at entry doors or gates. See Figure 1 which discloses a home with a home area (home having an environment).

a doorway located in the doorway, the ringing of the doorbell being a triggering event;

Sheynman discloses that the visitor monitor includes an actuator 113 which is a doorbell or other door ringer. See paragraph [0020] and Figure 1. As explained therein, the actuating the doorbell is part of a visitor alert (triggering event). See also Figure 2 which discloses that in response to the press of a button, an image or video is captured and transferred to a gateway. See paragraph [0025]

a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

With reference to Figure 1 and paragraph [0019], Sheynman discloses a visitor monitor with camera 111 for obtaining still or video images of visitors to be monitored, a speakerphone 112 (see paragraph [0022] which discloses that the visitor monitor includes a speaker/microphone) for communicating voice to and from visitors. As shown in Figure 1, the visitor monitor is on the doorway. With reference to Figure 2, upon actuation of the button (step 212) (triggering event) an image (video) is captured and transmitted to the network gateway (step 227).

The Examiner notes that while Sheynman discloses of sending visual communication in response to a visitor pressing the actuator button, Sheynman does not specifically disclose of also sending audio data. It is noted that Sheynman does send audio data at a time after the initial visual communication is sent as set forth above and in Figures 2 and 3.

Nonetheless, sending both visual and audio communications in response to a triggering event was known in the prior art.

For example, von Bauer discloses that in response to actuation of a doorbell button (or the triggering of an optional infrared sensor by the presence of a person near the sensor) visual images and

voice transmission are transmitted. See col. 5, lines 6-18, See also col. 17, lines 22-25 which discloses audio and video transmission in response to the sensor means.

Therefore, it would have been obvious to a person of ordinary skill in the art to send in addition to visual communication but audio communications. As disclosed by Sheynman, the visitor monitor is already configured to transmit both audio and video communications. Thus, the mechanism for capturing audio is already present in Sheynman. As set forth by von Bauer, both visual images and audio may be transmitted in response to actuation of a doorbell. Both Sheynman and von Bauer discloses of the desire to communicate both audible and visual between the visitor and the monitoring user. This permits for two-way voice conversation. Therefore, one of ordinary skill in the art would have also included audio with the communications in order to allow the visitor to also speak to the user.

As explained above, the Examiner finds that both Sheynman and von Bauer disclose capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications with von Bauer disclosing that its capturing is responsive to a triggering event. One of ordinary skill in the art would have combined these elements according to known methods (using the external speaker and camera for transmission of communications). One of ordinary skill in the art would have recognized this combination to be predictable since both Sheynman and von Bauer discloses of communicating audio and visual data to a user for communication with a visitor at the door.

an external speaker disposed in the doorway, the external speaker for rendering received audio communications;

As set forth in Figure 1, the visitor monitor includes a speakerphone 112. Figure 1 also shows that the network gateway communicates with a remote mobile phone user 134. Figure 2 shows a conversation occurring between the remote phone 250 and the visitor 210 through the visitor monitor as a voice call.

a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker; and

Sheynman discloses a gateway (control unit) which is in communication with the visitor monitor (includes a video camera, doorbell and microphone). See Figure 1 and paragraphs [0023-0024].

Sheynman discloses that the gateway communicates a video image from the visitor which was received from the visitor monitor to the remote cellular user. See paragraph [0026]. In addition, as explained above and in Figure 2, a voice call is established between the remote phone and the gateway and to the visitor monitor voice the transmission of audio communications to the visitor. See paragraph [0027-0028].

a cellular telephone disposed remotely to the doorway and the control unit,

See Figure 1 which shows a remote cellular subscriber enabled terminal 134 which is remote from the doorway and the gateway (control unit). See also paragraph [024].

the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, and

As explained by Sheynman, in paragraph [0019], the remote mobile user can communicate with the visitor via the gateway and visitor monitor via a cellular connection via voice (audio). That is communicating voice to and from visitors. See also paragraph [0028] which discloses the capturing of cellular audio communications at the remote mobile phone and the transmission of cellular audio comments from the remote mobile phone to the gateway. See also Figure 3.

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller;

Sheynman disclose that its control unit comprises a controller 151 (see figure 12) and a security alarm interface (see paragraph [0049]). The Examiner notes that Sheynman specifically discloses that the network gateway ‘comprises’ a network of appliances, devices, and sensors. The Examiner finds that although, Sheynman does not specifically, discloses of its network gateway comprises a control panel and a video monitor, Sheynman, as set forth above, clearly disclose that its network gateway can ‘comprise’ a

plurality of network appliances, devices, and sensors. Therefore, it would have been obvious to a person of ordinary skill in the art to look to other devices to add to the network gateway.

For example, Hershkovitz discloses that it was known to have a user interface 12 which is in direct communication with an external camera and doorbell switch. See paragraph [0020] and Figure 3. The user interface includes a display (video monitor) for allowing a user to view the camera image of the visitor (see paragraph [0021]) and a user interface control (control panel) for allowing a user to program the security system as well as program camera controls (see paragraphs [0024] and [0026]).

Therefore, it would have been obvious to a person of ordinary skill in the art to include a monitor and control panel in Sheynman's network gateway. As set forth above, Sheynman discloses that its gateway comprises a plurality of different appliances and devices that are part of the gateway. Thus, including a video monitor for the purpose of monitoring visitors when the user is at home and a control panel for receiving inputs/programming from the user while at home would have been predictable to a person of ordinary skill in the art. As explained by Hershkovitz, this allows a user, located near the entrance to see an image of the visitor prior to deciding whether to open the door as well as to control the viewing of the camera image. See paragraph [0021]

The Examiner finds that both Sheynman and von Bauer disclose of a control unit for connecting to the external camera/microphone in order to receive visual and audio communications. One of ordinary skill in the art would have combined these elements according to known methods (using the external speaker and camera for transmission of communications and a control unit for receive the communication). One of ordinary skill in the art would have recognized this combination to be predictable since both Sheynman and von Bauer discloses of communicating audio and visual data to a user for communication with a visitor at the door using a gateway or user interface within the home.

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

With reference to Figure 1, the visitor monitor 110 includes a doorbell (113), the external microphone (112), the external speaker (112), and a proximity detector ([0020]) as part of a single

communication unit. As set forth above, the visitor monitor includes a microphone and a speaker. See paragraph [0022]

wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry way and wirelessly streaming at least a portion of the captured visual and audio communications; and

Sheynman discloses of the visitor monitor (single communication unit) playing a pre-recorded message to the visitor (see paragraph [0025]). In addition, as set forth above, both captured visual and audio communication are streamed from the visitor monitor.

wherein the control unit is capable of receiving audio communications from the cellular telephone.

Figure 1 shows that the network gateway communicates with a remote mobile phone user 134. Figure 2 shows a conversation occurring between the remote phone 250 and the visitor 210 through the visitor monitor as a voice call. Thus, since the connection between the gateway and the remote phone is via a cellular connection (see paragraph [0023]), the visitor monitor receives cellular audio communications.

Regarding claim 21:

The doorbell monitoring system of claim 1, wherein the proximity detector detects a person proximate to the entry point;

As set forth above, see paragraph [0020] of Sheynman which discloses the visitor module includes various sensors including a proximity sensor. In addition, as also explained above, von Bauer discloses that in response to actuation of a doorbell button or the triggering of an optional infrared sensor by the presence of a person near the sensor, visual images and voice transmission are transmitted. See col. 5, lines 6-18

wherein the detection by the proximity detector of the person proximate to the entry point provides a second triggering event; and

von Bauer discloses that in response to actuation of a doorbell button or the triggering of an optional infrared sensor by the presence of a person near the sensor, visual images and voice transmission are transmitted. See col. 5, lines 6-18

wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.

The Examiner notes that claim 1, already recites the capturing of audio and visual communications at the entry point and transmitting the captured visual and audio communications. Von Bauer discloses that in response to actuation of a doorbell button or the triggering of an optional infrared sensor by the presence of a person near the sensor, visual images and voice transmission are transmitted. See col. 5, lines 6-18.

Thus, both doorbell actuation as well as proximity detection causes visual and audio communications to be communicated to the control unit (or gateway of Sheynman). As set forth above, it would have been obvious to a person of ordinary skill in the art to transmit visual and audio in response to triggering of a proximity detector.

Regarding claim 22:

The doorbell monitoring system of claim 1, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

With reference to Figure 1 and paragraph [0019], Sheynman discloses a visitor monitor with camera 111 for obtaining still or video images of visitors to be monitored, a speakerphone 112 (see paragraph [0022] which discloses that the visitor monitor includes a speaker/microphone) for communicating voice to and from visitors. With reference to Figure 2, upon actuation of the button (step 212) (triggering event) an image (video) is captured and transmitted to the network gateway (step 227).

Further, subsequent to this step, a conversation between the visitor and the remote user is held and thus additional audio is received/transmitted. See paragraph [0028]. In addition, after the initial

ringing of the doorbell, Hershkovitz discloses that the user will go the user interface and would see an image of the visitor prior to deciding to open the door. Thus, the capture video, includes the initial video and the additional video that occurs after the actuation of the doorbell.

Regarding claim 23:

The doorbell monitoring system of claim 22, wherein the single communications unit is configured to capture additional video from the video camera after a second triggering event.

With reference to Figure 1 and paragraph [0019], Sheynman discloses a visitor monitor with camera 111 for obtaining still or video images of visitors to be monitored, a speakerphone 112 (see paragraph [0022] which discloses that the visitor monitor includes a speaker/microphone) for communicating voice to and from visitors. With reference to Figure 2, upon actuation of the button (step 212) (triggering event) an image (video) is captured and transmitted to the network gateway (step 227).

Further, subsequent to this step, a conversation between the visitor and the remote user is held and thus additional audio is received/transmitted. See paragraph [0028]. In addition, after the initial ringing of the doorbell, Hershkovitz discloses that the user will go the user interface and would see an image of the visitor prior to deciding to open the door. Thus, the capture video, includes the initial video and the additional video that occurs after the actuation of the doorbell.

Regarding claim 25:

The doorbell monitoring system of claim 1 ,wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

Sheynman discloses that the visitor monitor includes an actuator 113 which is a doorbell or other door ringer. See paragraph [0020] and Figure 1. As explained therein, the actuating the doorbell is part of a visitor alert (triggering event). See also Figure 2 which discloses that in response to the press of a button, an image or video is captured and transferred to a gateway. See paragraph [0025]

In addition, as set forth above, the gateway of Sheynman, in combination with Hershkovitz discloses of providing a display to view the display the visitor on the control unit's display. See paragraphs [0005], [0021] and [0024].

As explained above, it would have been obvious to a person of ordinary skill in the art to include a display on the control unit (network gateway).

Regarding claim 26:

The doorbell monitoring system of claim 25, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

Sheynman discloses that the visitor monitor includes an actuator 113 which is a doorbell or other door ringer. See paragraph [0020] and Figure 1. As explained therein, the actuating the doorbell is part of a visitor alert (triggering event). See also Figure 2 which discloses that in response to the press of a button, an image or video is captured and transferred to a gateway. See paragraph [0025].

In addition, as set forth above, the gateway of Sheynman, in combination with Hershkovitz discloses of providing a display to view the display the visitor on the control unit's display. See paragraphs [0005], [0021] and [0024].

Regarding claim 29:

The doorbell monitoring system of claim 1, wherein the control unit further comprises a data storage unit wherein the control unit is capable of storing the entry point visual and audio communications data in the data storage unit of the control unit.

As set forth in paragraph [0048], Sheynman discloses that the network gateway may include a recording device for recording and storing visitor messages.

In addition, Hershkovitz discloses the storage of activities and camera images in the user interface
12.

Therefore, it would have been obvious to a person of ordinary skill in the art to store captured data in a data storage unit so that the user can later retrieve the images for further analysis and viewing. The Examiner finds that since Sheynman already discloses of a desire to record and store visitor messages a person of ordinary skill in the art would have included a data storage unit using this known methods (storing data) and that the combination were predictable since both Sheynman and Hershkovitz discloses of storing data based on the interaction with the visitor.

Regarding claim 30:

The doorbell monitoring system of claim 1, wherein the alarm system interface is connected to an alarm system, and wherein the control panel comprises a graphical user interface displayed at least in part on the video monitor wherein the graphical user interface allows an individual to manage the alarm system.

Sheynman discloses that its gateway is connected to a home security interface. In addition, as set forth above, Hershkovitz discloses that its interface also provided for home security as well as a graphical user interface for managing (programming) the alarm system. See paragraph [0024].

As set forth above, Sheynman already discloses of interfacing its gateway with a home security interface and thus providing a graphical user interface in order to program or manage the security alarm (whether it be for activating/deactivating or other function), a person of ordinary skill in the art would have found it obvious to have a control patent in order to control their security system.

Regarding claim 31:

The doorbell monitoring system of claim 1, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the communications unit.

See Figure 10 of Sheynman which discloses the generation of a file that includes the captured image data. See paragraph [0042].

Regarding claim 32:

The doorbell monitoring system of claim 1, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the communications unit.

See Figure 2 of Sheynman which discloses the user taking two or more actions including requesting the establishing of communications and terminating communications. See also paragraph [0028]

Regarding claim 33:

The doorbell monitoring system of claim 32, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

See Figure 2 of Sheynman which discloses the user taking two or more actions including requesting the establishing of communications and terminating communications. See also paragraph [0028]

Regarding claim 34:

The doorbell monitoring system of claim 1, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

As set forth in paragraph [0048], Sheynman discloses that the network gateway may include a recording device for recording and storing visitor messages.

In addition, Hershkovitz discloses the storage of activities and camera images in the user interface 12.

Therefore, it would have been obvious to a person of ordinary skill in the art to store captured data in a data storage unit so that the user can later retrieve the images for further analysis and viewing. The Examiner finds that since Sheynman already discloses of a desire to record and store visitor messages a person of ordinary skill in the art would have included a data storage unit using this known methods (storing data) and that the combination were predictable since both Sheynman and Hershkovitz discloses of storing data based on the interaction with the visitor.

Regarding claim 35:

The doorbell monitoring system of claim 1, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

Sheynman discloses that the stored visitor data are accessible by an image server which is apart from the control unit. See Figure 2 and paragraphs [0026-0027]

Regarding claim 36:

The system of claim 34, wherein the onsite storage device is capable of providing the additional device with access to the stored video and audio communications in substantially realtime.

Hershkovitz discloses that a laptop (additional device) can access the stored visitor data. Hershkovitz discloses that this provides the user with a bigger screen for viewing and analysis of the images See paragraphs [0019] and [0023]

Regarding claim 37:

The system of claim 34, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

As set forth in paragraph [0048], Sheynman discloses that the network gateway may include a recording device for recording and storing visitor messages.

In addition, Hershkovitz discloses the storage of activities and camera images in the user interface 12. Therefore, it would have been obvious to a person of ordinary skill in the art to store captured data in a data storage unit so that the user can later retrieve the images for further analysis and viewing. See Figure 1 which shows that the connections are wired. See paragraph [0031].

The Examiner finds that since Sheynman already discloses of a desire to record and store visitor messages a person of ordinary skill in the art would have included a data storage unit using this known methods (storing data) and that the combination were predictable since both Sheynman and Hershkovitz discloses of storing data based on the interaction with the visitor.

In addition, Sheynman also discloses that the connection between the visitor monitor and the gateway can be via hardwired connection. See paragraph [0028]

12. Claim 19 is/are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Sheynman US Patent Pub. 2005/0285734 in view of von Bauer US Patent No. 5,428,388.

Regarding claim 19:

A system for providing doorbell monitoring, the system comprising:

Sheynman is directed an intercom system including detecting the presence of a visitor at a visitor monitor, communicating (224) information received at the visitor monitor in association with the visitor detected to a remotely located communications network gateway, communicating (232) the presence of the visitor from the communication network gateway to a remote terminal. See the abstract. In addition, Sheynman discloses that the visitor monitor includes an actuator 113 which is a doorbell or other door ringer. See paragraph [0020]

a doorway to a home having an environment;

As explained in paragraph [0019], Sheynman discloses that the visitor monitor is located at entry doors or gates. See Figure 1 which discloses a home with a home area (home having an environment).

a doorway located in the doorway, the ringing of the doorbell being a triggering event;

Sheynman discloses that the visitor monitor includes an actuator 113 which is a doorbell or other door ringer. See paragraph [0020] and Figure 1. As explained therein, the actuating the doorbell is part of a visitor alert (triggering event). See also Figure 2 which discloses that in response to the press of a button, an image or video is captured and transferred to a gateway. See paragraph [0025]

a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

With reference to Figure 1 and paragraph [0019], Sheynman discloses a visitor monitor with camera 111 for obtaining still or video images of visitors to be monitored, a speakerphone 112 (see paragraph [0022] which discloses that the visitor monitor includes a speaker/microphone) for communicating voice to and from visitors. As shown in Figure 1, the visitor monitor is on the doorway.

With reference to Figure 2, upon actuation of the button (step 212) (triggering event) an image (video) is captured and transmitted to the network gateway (step 227).

The Examiner notes that while Sheynman discloses of sending visual communication in response to a visitor pressing the actuator button, Sheynman does not specifically disclose of also sending audio data. It is noted that Sheynman does send audio data at a time after the initial visual communication is sent as set forth above and in Figures 2 and 3.

Nonetheless, sending both visual and audio communications in response to a triggering event was known in the prior art.

For example, Von Bauer discloses that in response to actuation of a doorbell button (or the triggering of an optional infrared sensor by the presence of a person near the sensor) visual images and

voice transmission are transmitted. See col. 5, lines 6-18, See also col. 17, lines 22-25 which discloses audio and video transmission in response to the sensor means.

Therefore, it would have been obvious to a person of ordinary skill in the art to send in addition to visual communication but audio communications. As disclosed by Sheynman, the visitor monitor is already configured to transmit both audio and video communications. Thus, the mechanism for capturing audio is already present in Sheynman. As set forth by von Bauer, both visual images and audio may be transmitted in response to actuation of a doorbell. Both Sheynman and von Bauer discloses of the desire to communicate both audible and visual between the visitor and the monitoring user. This permits for two-way voice conversation. Therefore, one of ordinary skill in the art would have also included audio with the communications in order to allow the visitor to also speak to the user.

a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway;

As set forth in paragraph [0020], the visitor module includes various sensors including a proximity sensor. The Examiner however, finds that Sheynman does not specifically disclose whether its proximity sensor actuates the video camera and external microphone.

Nonetheless, as explained above, von Bauer discloses that in response to actuation of a doorbell button or the triggering of an optional infrared sensor by the presence of a person near the sensor, visual images and voice transmission are transmitted. See col. 5, lines 6-18 The Examiner notes that as explained above, it would have been obvious to transmit in addition to visual communication but audio communications.

an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;

As set forth in Figure 1, the visitor monitor includes a speakerphone 112. Figure 1 also shows that the network gateway communicates with a remote mobile phone user 134. Figure 2 shows a conversation occurring between the remote phone 250 and the visitor 210 through the visitor monitor as a voice call.

Thus, since the connection between the gateway and the remote phone is via a cellular connection (see paragraph [0023], the visitor monitor receives cellular audio communications.

a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

Sheynman discloses a gateway (control unit) which is in communication with the visitor monitor (includes a video camera, doorbell and microphone). See Figure 1 and paragraphs [0023-0024].

Sheynman discloses that the gateway communicates a video image from the visitor which was received from the visitor monitor to the remote cellular user. See paragraph [0026]. In addition, as explained above and in Figure 2, a voice call is established between the remote phone and the gateway and to the visitor monitor voice the transmission of audio communications to the visitor. See paragraph [0027-0028].

a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit,

See Figure 1 which shows a remote cellular subscriber enabled terminal 134 which is remote from the doorway and the gateway (control unit). See also paragraph [024].

the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.

As explained by Sheynman, in paragraph [0019], the remote mobile user can communicate with the visitor via the gateway and visitor monitor via a cellular connection via voice (audio). That is communicating voice to and from visitors. See also paragraph [0028] which discloses the capturing of

cellular audio communications at the remote mobile phone and the transmission of cellular audio comments from the remote mobile phone to the gateway. See also Figure 3.

13. Claim 19 is/are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Sheynman US Patent Pub. 2005/0285734 in view of Menard WO 01/93220 A1 and Xin US Patent 6,429,893.

Regarding claim 19:

A system for providing doorbell monitoring, the system comprising:

Menard is directed to a communication and control system which includes a module with a doorbell which may be activated by a caller arriving at a door. See page 20, lines 13-20.

a doorway to a home having an environment;

With reference to Figure 7, a doorway to a home having an environment is shown. See also page 19, line 30 – page 20, line 1 and page 20, lines 23-31 and Figure 1.

a doorway located in the doorway, the ringing of the doorbell being a triggering event;

With reference to Figure 7, a doorway is depicted. See also page 19, line 30 – page 20, line 1. As explained in page 20, lines 13-17, a caller can initiate communication by operating module 200D in the same way as a doorbell, by activating a prominent and conspicuous button (triggering event).

a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications;

With reference to Figure 8, and page 21, lines 11-28, a caller signals their arrival by actuating a doorbell button. In addition, a video camera 370 is also configured to detect the arrival of a caller which would cause the transmission of a message. Menard further discloses that a user can open bi-directional verbal discourse with a caller and further the user can cause exterior module 200D to capture an image using exterior video camera (real-time video image). The Examiner notes that since the caller and user can communicate bi-directionally then the module inherently includes a microphone. This is similar to

other disclosed embodiments in which a microphone is used to receive local audio from a caller located outside the premises. See page 42, lines 1-6

The Examiner notes that as explained above, Menard discloses that in response to actuation of the doorbell, a signal is transmitted. Menard, however, does not explicitly disclose whether this signal includes both audio and visual communications.

Nonetheless, the Examiner notes that Xin discloses of a door unit (external to a home) which is triggered in response to detecting motion from a person who approaches the door. See the abstract.

Xin discloses in col. 4, lines 33-46, that in response to a triggering event (e.g. motion detected by the proximity sensor) a first signal representative is sent and video signals are substantially displayed. In addition, in col. 4, lines 47-54, simultaneously with the recording of the video signals, audio signals are recorded. Thus, both visual and audio signals are transmitted in response to the motion triggering event. See also claims 1-3 of Xin.

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the wireless signal of Menard to include both audio and visual communications. As explained by Menard a signal is transmitted in response to actuation of a doorbell. Menard, does not specifically disclose of the contents of the signal, however, as disclosed by Xin, in response to an action of a detector at a door unit, both audio and visual communications are simultaneously communicated for both recording and displaying. This allows a user to view the activity outside the door and to communicate with the outside person. See col. 4, lines 55-63 which discloses that the signals are sent from the outside to the inside so that a person outside may communicate with the person inside the structure. Thus, one of ordinary skill in the art would have sent visual and audio communications so that the visitor of Menard can provide initial communications with the person either inside of the home or remotely.

a proximity detector disposed in the doorway, the proximity detector for actuating the video camera and the external microphone in response to an individual approaching the doorway;

Menard discloses in page 4, lines 16-18 that the system includes a sensor such as a proximity detector. See page 5, line 25 - page 6, line 17, which explains that a proximity sensor detects the presence of a caller near the exterior module which would actuation the transmission of a digital message.

an external speaker disposed in the doorway, the external speaker for rendering received cellular audio communications;

As explained above and on page 21, lines 11-28, a caller and a user can engage in bidirectional verbal discourse. Therefore, the module includes an external speaker.

Menard also discloses that the module communicates with a cellular telephone via LD comm module. As further explained in page 16, LD comm module 250 communicates with PDU 400 (of the user) over link 225 which may include a cellular telephone network. See also page 20, lines 25-27. In addition, see page 21, lines 18-26 which discloses of bi-directional communications between a user (which may be remote from the premises and connected to the LD comm module via cellular communications) and a caller located at the door of the premises using the exterior module

a control unit disposed in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone, and for communicating the received cellular audio communications to the external speaker; and

Menard discloses a Long Distance Communication Module (LD comm module 250) (control unit) which is in communication with the module 200 (which as set forth above includes a video camera, doorbell and microphone). See Figure 1 and 3A. See page 12, lines 20-31, page 13, lines 3-9. As further explained in page 16, LD comm module 250 communicates with PDU 400 (of the user) over link 225 which may include a cellular telephone network. See also page 20, lines 25-27. In addition, see page 21, lines 18-26 which discloses of bi-directional communications between a user (which may be remote from the premises and connected to the LD comm module via cellular communications) and a caller located at the door of the premises using the exterior module. In addition, Menard discloses that the exterior module can capture still images or real-time video and to transmit that to the PDU 400. As set forth above, it

would have been obvious to a person of ordinary skill in the art to transmit both visual and audio communications to the control unit and as explained with Menard, to communicate that communication to the a user as well as receive cellular audio communication from that user for transmissions to the external speaker of the doorbell module.

a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit,

As explained above, Menard discloses of a PDU (cellular telephone) which is in the possession of the user (homeowner) and remotely to the doorway and the control unit. See Figure 1 and 3A. In addition, see page 4, lines 27-31. See also Figure 4 which shows a cellular telephone (page 16, lines 22-26, page 17, lines 47). See also page 20, lines 25-28, which shows that the user is located outside of the residence.

the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home.

Menard discloses a Long Distance Communication Module (LD comm module 250) (control unit) which is in communication with the module 200 (which as set forth above includes a video camera, doorbell and microphone). See Figure 1 and 3A. See page 12, lines 20-31, page 13, lines 3-9. As further explained in page 16, LD comm module 250 communicates with PDU 400 (of the user) over link 225 which may include a cellular telephone network. See also page 20, lines 25-27. In addition, see page 21, lines 18-26 which discloses of bi-directional communications between a user (which may be remote from the premises and connected to the LD comm module via cellular communications) and a caller located at the door of the premises using the exterior module. In addition, Menard discloses that the exterior module can capture still images or real-time video and to transmit that to the PDU 400.

Menard further discloses that a user can open bi-directional verbal discourse with a caller and further the user can cause exterior module 200D to capture an image using exterior video camera (real-

time video image). See page 20 ,lines 13-31. As explained in page 17, lines 3-7, a user with a cellular telephone is able to communicate "as though the user was local".

Conclusion

13. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 7,583,191 throughout the course of this reexamination proceeding. The Patent Owner is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

14. Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

All correspondence relating to this ex parte reexamination proceeding should be directed:

Electronically: Registered users may submit via Patent Center at <https://patentcenter.uspto.gov/>.

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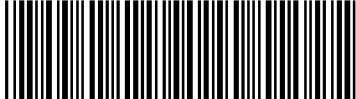
Notice of References Cited	Application/Control No. 90/019,542		Applicant(s)/Patent Under Reexamination 7583191	
	Examiner OVIDIO ESCALANTE		Art Unit 3992	Page 1 of 1

U.S. PATENT DOCUMENTS						
*		Document Number Country Code-Number-Kind Code	Date YYYY-MM-DD	Name	CPC Classification	US Classification
*	A	US-6429893-B1	2002-08-06	Xin; Alfred X.	G08B13/19695	348/155
*	B	US-20040257336-A1	2004-12-23	HersHKovitz, Shmuel	G08B25/008	345/156
*	C	US-20050007451-A1	2005-01-13	Chiang, Thomas Shiaw-Cherng	G08B13/19697	348/143
*	D	US-20050285734-A1	2005-12-29	Sheynman, Arnold	H04N21/42203	340/539.21
*	E	US-20060139449-A1	2006-06-29	Cheng; Wen-Liang	H04N7/186	348/61
*	F	US-7193644-B2	2007-03-20	Carter; Ronald	H04N7/142	348/14.06
*	G	US-20090015711-A1	2009-01-15	Yamamoto; Akira	H04N7/186	348/E7.003
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	I					
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FOREIGN PATENT DOCUMENTS					
*		Document Number Country Code-Number-Kind Code	Date YYYY-MM-DD	Country	CPC Classification
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in YYYY-MM-DD format are publication dates. Classifications may be US or foreign.

Reexamination 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Certificate Date	Certificate Number

Requester Correspondence Address: ☒ Patent Owner ☐ Third Party
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226

LITIGATION REVIEW ☒	OE (examiner initials)	10 April 2025 (date)
Case Name		Director Initials
8:22cv33, Vivint Inc. V. Sb Lp Holdings Llc (closed)		
8:22cv34, Vivint Inc. V. Sb Lp Holdings Llc (closed)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER

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<i>Search Notes</i> 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

CPC - Searched*		
Symbol	Date	Examiner
None	04/10/2025	OE

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed patent file, family application files, PTACTS, lit. search	09/12/2024	LMN
PE2E Search	04/10/2025	OE
P-TACTS for AIA Proceedings	04/10/2025	OE
PDP (Patent Data Portal) for continuity data	04/10/2025	OE
Reviewed Reexam File (90/019,542)	04/10/2025	OE
Reviewed underlying patent file (US 7583191)	04/10/2025	OE

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

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Doc description: Information Disclosure Statement (IDS) Filed

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number		90019542
Filing Date		2024-08-15
First Named Inventor	Duke Zinser	
Art Unit	3992	
Examiner Name	Nguyen, Linh M	
Attorney Docket Number		

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	
	1	8520068	B2	2013-08-27	Naidoo et al.		
	2	5828848	A	1998-10-27	MacCormack		
	3	4897630	A	1990-01-30	Nykerk		
	4	7933945	B2	2011-04-26	Krzyzanowski et al.		
	5	6385772	B1	2002-05-07	Courtney		
	6	6735387	B1	2004-05-11	Schnell		
	7	5604551	A	1997-02-18	Choi et al.		
	8	5781108	A	1998-07-14	Jacob et al.		

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	90019542
Filing Date	2024-08-15
First Named Inventor	Duke Zinser
Art Unit	3992
Examiner Name	Nguyen, Linh M
Attorney Docket Number	

	9	6970183	B1	2005-11-29	Monroe	
	10	7506020	B2	2009-03-17	Ellis	

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	1	20030167176	A1	2003-09-04	Knudson et al.	
	2	20060063517	A1	2006-03-23	Oh et al.	
	3	20050010649	A1	2005-01-13	Payne et al.	
	4	20030045268	A1	2003-03-06	Himmel et al.	
	5	20030046503	A1	2003-03-06	Park	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		90019542	
	Filing Date		2024-08-15	
	First Named Inventor	Duke Zinser		
	Art Unit	3992		
	Examiner Name	Nguyen, Linh M		
	Attorney Docket Number			

	1	0038174	WO	A1	2000-06-29	Lands		☐
	2	0084277	KR	A	2003-03-04	Jae		☐
	3	0165875	WO	A1	2001-09-07	Sabie		☐
	4	0193220	WO	A1	2001-12-06	Menard		☐

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¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	90019542
Filing Date	2024-08-15
First Named Inventor	Duke Zinser
Art Unit	3992
Examiner Name	Nguyen, Linh M
Attorney Docket Number	

CERTIFICATION STATEMENT

Please see 37 CFR 1.97(e) to make the appropriate selection(s):

☐

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- ☐ See attached certification statement.
- ☒ A certification statement is not submitted herewith.

FEE

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

COPIES

☐ An identification of an earlier application pursuant to 37 CFR 1.98 (d) (1) is attached.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kirby Drake/	Date (YYYY-MM-DD)	2024-11-11
Name/Print	Kirby Drake	Registration Number	55126

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L2	2	("5428388" "20040080615").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/02 07:20 AM
L8	27	"0193220"	(FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/02 07:22 AM
L9	7	("2019088016").pn.	(FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/02 08:44 AM
L10	7	("2019088016").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/02 08:45 AM
L11	4	("20190088016").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR,	OR	ON	ON	2025/04/02 08:45 AM

L12	3	("20240106984").pn.	HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/02 08:51 AM
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L14	2	("9055202").pn.	(FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/02 01:04 PM
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L19	5	(@rld<="20061114" OR @ad<="20061114") AND L16 AND doorbell AND cellular	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/02 01:09 PM
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L23	4	(@rld<="20061114" OR @ad<="20061114") AND doorbell AND cellular AND video WITH stream\$ SAME doorbell AND alarm	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/02 01:51 PM
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L38	1	"0193220" AND video AND cellular	(FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/03 06:07 AM
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L40	1	"0193220" AND video AND cellular AND comm ADJ module AND base SAME security	(FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/03 07:04 AM
L41	4	("7583191").pn.	(FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/03 07:21 AM
L42	5	("7583191").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/03 07:22 AM
L43	0	("2005028934").pn.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 05:36 AM
L44	1	("20050285934").pn.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 05:36 AM
L45	52	(@rlad<="20061114" OR @ad<="20061114") AND doorbell SAME (video OR audio) SAME cellular	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 05:59 AM
L46	375	("5428388").urpn. AND (PGPB USPT USOC).dbnm.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 08:04 AM

L47	70	(@rld<="20061114" OR @ad<="20061114") AND L46	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 08:05 AM
L48	28	(@rld<="20061114" OR @ad<="20061114") AND L46 AND proximity AND video	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 08:09 AM
L49	1	("20050285734").pn.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 08:18 AM
L51	105	(@rld<="20061114" OR @ad<="20061114") AND doorbell SAME camera AND security AND proximity	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 09:31 AM
L52	5	("5995139").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 09:32 AM
L53	445	(@rld<="20061114" OR @ad<="20061114") AND gateway WITH alarm WITH (display OR monitor)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 09:33 AM
L54	0	(@rld<="20061114" OR @ad<="20061114")	(US-PGPUB; USPAT; USOCR; FIT (AP, AT,	OR	ON	ON	2025/04/04 09:33 AM

		AND gateway WITH alarm WITH (display OR monitor) AND doorbell	AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L55	4	(@rlad<="20061114" OR @ad<="20061114") AND gateway WITH alarm WITH (display OR monitor) AND door ADJ bell	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 09:33 AM
L56	33	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME (security OR alarm) SAME (display OR monitor) AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 09:34 AM
L57	22	(@rlad<="20061114" OR @ad<="20061114") AND L46 AND security AND authenticat\$	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 09:39 AM
L58	0	X10 ADJ Security ADJ Home	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 09:48 AM
L59	3	X10 ADJ Security	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 09:48 AM
L60	137	X10 WITH Security	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 09:48 AM
L61	56	(@rlad<="20061114" OR @ad<="20061114")	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 09:48 AM

L62	101	AND L60 (@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2025/04/04 10:16 AM
L63	4	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 10:17 AM
L64	25	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display SAME security	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 10:18 AM
L65	3	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display SAME security	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 10:18 AM
L66	101	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 10:20 AM
L67	0	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display AND video ADJ camera SAME (outside OR exterior)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 10:40 AM
L68	7	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU,	OR	ON	ON	2025/04/04 10:40 AM

L69	4	AND video ADJ camera SAME (outside OR exterior) ("20090015711").pn.	CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/04 10:43 AM
L70	13	(@rlad<="20061114" OR @ad<="20061114") AND home ADJ gateway WITH display SAME video ADJ camera	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 10:54 AM
L71	17	(@rlad<="20061114" OR @ad<="20061114") AND home SAME gateway WITH display SAME video ADJ camera	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 10:56 AM
L72	259	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME display SAME video ADJ camera	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 12:42 PM
L73	2	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME display SAME video ADJ camera AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 12:42 PM
L76	2	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME display SAME camera AND (doorbell OR door ADJ bell) AND (MPS	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 12:46 PM

L77	6	AND gateway) (@rlad<="20061114" OR @ad<="20061114") AND gateway SAME display SAME camera AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/04 12:46 PM
L78	17	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME display SAME camera AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/07 06:08 AM
L79	82	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME (video ADJ monitor OR display) AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/07 06:20 AM
L80	28	(@rlad<="20061114" OR @ad<="20061114") AND gateway SAME (video ADJ monitor OR display) AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 06:20 AM
L81	243	(@rlad<="20061114" OR @ad<="20061114") AND alarm SAME (video ADJ monitor OR display) AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 06:32 AM
L82	79	(@rlad<="20061114" OR @ad<="20061114") AND alarm SAME (video ADJ monitor OR display) SAME (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 06:32 AM

L83	2	(@rlad<="20061114" OR @ad<="20061114") AND alarm SAME (video ADJ monitor OR display) SAME (doorbell OR door ADJ bell) AND security ADJ alarm	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 06:32 AM
L84	45	(@rlad<="20061114" OR @ad<="20061114") AND (video ADJ monitor OR display) SAME (doorbell OR door ADJ bell) SAME panel	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 06:42 AM
L85	4	(@rlad<="20061114" OR @ad<="20061114") AND (video ADJ monitor OR display) SAME (doorbell OR door ADJ bell) SAME control ADJ panel	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 06:42 AM
L86	4	(@rlad<="20061114" OR @ad<="20061114") AND motion SAME proximity SAME (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 09:23 AM
L87	11	(@rlad<="20061114" OR @ad<="20061114") AND motion SAME proximity SAME (doorbell OR door ADJ bell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/07 09:23 AM
L89	110	(@rlad<="20061114" OR @ad<="20061114") AND motion SAME proximity AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO;	OR	ON	ON	2025/04/07 09:23 AM

L90	74	(@rld<="20061114" OR @ad<="20061114") AND motion SAME proximity AND (doorbell OR door ADJ bell)	DERWENT; IBM_TDB) (US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 09:23 AM
L91	22	(@rld<="20061114" OR @ad<="20061114") AND motion SAME proximity AND (doorbell OR door ADJ bell) SAME (video OR image OR visual)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 09:24 AM
L92	1	("11145288").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/07 11:05 AM
L93	46	(@rld<="20061114" OR @ad<="20061114") AND camera SAME proximity AND (doorbell OR door ADJ bell)	(US-PGPUB; USPAT)	OR	ON	ON	2025/04/08 06:55 AM
L94	5	("6429893").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/08 07:17 AM
L95	3	("8289688").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/04/08 09:29 AM
L96	2	("9549426").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE,	OR	ON	ON	2025/04/08 02:14 PM

L103	17	("20030045268" OR "20030046503" OR "20030167176" OR "20050010649" OR "20060063517" OR "4897630" OR "5604551" OR "5781108" OR "5828848" OR "6385772" OR "6735387" OR "6970183" OR "7506020" OR "7933945" OR "8520068" OR "20040080615" OR "5428388").pn.	ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT)	OR	ON	ON	2025/04/10 07:51 AM
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PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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90/019,542

08/15/2024

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178493 7590 05/09/2025
Kirby Drake Law PLLC
2550 Pacific Avenue
Suite 700
Dallas, TX 75226

EXAMINER

ESCALANTE, OVIDIO

ART UNIT	PAPER NUMBER
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3992

MAIL DATE	DELIVERY MODE
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05/09/2025

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<i>Ex Parte Reexamination Interview Summary</i>	Control No. 90/019,542	Patent Under Reexamination 7583191	
	Examiner OVIDIO ESCALANTE	Art Unit 3992	AIA (FITF) Status No

All participants (USPTO personnel, patent owner, patent owner's representative):

(1) <u>Ovidio Escalante</u>	(3) <u>Matthew Heneghan</u>
(2) <u>Michael Fuelling</u>	(4) <u>Kirby Drake (Patent Owner's Representative)</u>

Date of Interview: 07 May 2025

Type: a) ☐ Telephonic b) ☒ Video Conference
c) ☐ Personal (copy given to: 1) ☐ patent owner 2) ☐ patent owners representative)

Exhibit shown or demonstration conducted: d) ☒ Yes e) ☐ No.
If Yes, brief description: Interview Agenda

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.
Any other agreement(s) are set forth below under "Description of the general nature of what was agreed to..."

Claim(s) discussed: 8,19,38-40,45-46,50,52 and 116 .

Identification of prior art discussed: Sheynman, Von Bauer, Menard, Xin .

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:
See Continuation Sheet .

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims patentable, if available, must be attached. Also, where no copy of the amendments that would render the claims patentable is available, a summary thereof must be attached.)

A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION MUST INCLUDE PATENT OWNER'S STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. (See MPEP § 2281). IF A RESPONSE TO THE LAST OFFICE ACTION HAS ALREADY BEEN FILED, THEN PATENT OWNER IS GIVEN **ONE MONTH** FROM THIS INTERVIEW DATE TO PROVIDE THE MANDATORY STATEMENT OF THE SUBSTANCE OF THE INTERVIEW (37 CFR 1.560(b)). THE REQUIREMENT FOR PATENT OWNERS STATEMENT CAN NOT BE WAIVED. **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992	/MATTHEW E HENEGHAN/ Primary Examiner, Art Unit 3992	
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cc: Requester (if third party requester)

Continuation of Description of the general nature of what was agreed to if an agreement was reached, or any other comments:

With respect to claim 39, the Examiners and the Patent Owner's Representative discussed the proposed claim amendment. The Examiner noted that the amendment raises a potential broadening issue since the claim no longer recited that the actuation of the doorbell as the triggering event or that it is the cause for the capturing of visual and audio communications. The Examiner also noted that claim 39 recites "wherein the video camera is configured to collect the entry point visual and audio communications before the triggering event". The Examiner found that the specification did not disclose a "video camera" is configured to collect audio communication, rather the specification discloses a microphone performs that function. The Examiner also agreed with the patent owner's representative that the patent specification discloses collecting entry point visual communications before the triggering event if the triggering event is the actuation of a doorbell, however, the Examiner noted that it was not clear whether this can occur with the proximity detection embodiments.

With respect to claim 38, the Examiner discussed the proposed amendment directed to "wherein the video camera is configured to collect the entry point visual and audio communications before the triggering event". The Examiner noted that the patent specification was clear as to collecting visual communication when the triggering event is the actuation of a doorbell, but it wasn't clear as to whether audio can also be collected "before the triggering event".

With respect to claim 40, the Examiner noted that the limitation wasn't clear from the patent specification whether a pre-recorded message to a visitor could occur before the triggering event. It was agreed that video can be captured before the doorbell actuation triggering event.

With respect to claim 46, the Examiner asked for clarification as to the limitations which recited 'doorbell is configured....' Specifically whether instead of reciting doorbell whether it should recite either the single communication unit or doorbell monitoring system that performs the claimed functions (or some other entity). The Examiner also noted that this claim had the same issue with respect to recording audio before the triggering event as earlier discussed with respect to claim 39.

With respect to claim 50, the Examiner acknowledged the change to "at least two" (i.e. at least two actions). The issue regarding "no action" was determined to potentially cause issues. Various potential changes were discussed as to this issue.

With respect to claims 8,45, 52, and 116 the Examiner acknowledged the proposed amendments and had no further comments with the changes.

With respect to claim 19 and the combination of Sheynman and Von Bauer, the Examiner acknowledged that Sheynman did not disclose sending audio in response to the triggering event (audio transmission occurred later in Sheynman). However, the Examiner noted that Von Bauer discloses sending visual and audio communications. Patent Owner's representative stated that the audio is not received by the remote owner prior to the two way communications. The Examiner noted that the claim recites "rendering the at least one portion". The Examiner noted that "at least one portion" of visual and audio communication only required either visual or audio but not necessarily both. The Examiner referenced non-reexamined claim 5 which shows that "at least one portion" can include only 'audio'. Therefore, it would be reasonable to consider only 'visual' for "at least one portion".

With respect to claim 19 and the combination of Menard and Xin, the Patent Owner's representative stated that Xin did not disclose transmitting visual and audio communications. The Examiner noted that with audio and visual communications are captured from the door unit and received by the internal unit and that the

claim limitation did not specifically state where it was transmitted. The Examiner further noted with respect to whether Xin discloses the transmission of audio and visual communications to a remote user, that Xin discloses an RF A/V receiver in the remote unit of Xin (figure 2) which discloses of receiving audio/video from the RF A/V Transceiver of Figure 1 which receives audio and video from the door unit. It was further noted that the remote unit (figure 2) was configured to receive cellular communications.

Examiner Interview May 7, 2025 1 pm Eastern

Reexamination No. 90/019,542

1. Review proposed amended claim 39 which has been amended into an independent claim where the triggering event is defined as the actuation of the proximity detector. Claims 56, 74, 91 proposed to be similarly amended.
2. Section 112 Rejections and Proposed Amendments
 - a. Proposed amended claim 8 addressing Grounds B and C1.
 - b. Proposed amended claim 38 addressing Grounds A, H, C1, and C2.
 - c. Proposed amended claim 40 addressing Ground C1.
 - d. Proposed amended claim 45 addressing Ground F.
 - e. Proposed amended claim 46 addressing Ground C3.
 - f. Proposed amended claim 50 addressing issue of “at least one of” actions fulfilling the requirement of “two or more actions” in the claim language. See Office Action at 20.
 - g. Proposed amended claim 52 addressing issue with antecedent basis by claiming dependence to another dependent claim which provides a stored video and audio communications. See Office Action at 20.
 - h. Proposed amended claim 116 addressing Ground C1.
3. Discuss 103 Rejections Related to Claim 19
 - a. *Sheynman* in view of *Von Bauer*
 - i. “a video camera and an external microphone disposed in the doorway, the video camera and external microphone for, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications” – no showing in *Sheynman* that the captured "visual and audio communications" are transmitted after a triggering event but before the owner establishes two way communication. In *Sheynman*, only a message, not audio or video communications, is sent after triggering event but before owner chooses to receive an image or to communicate with visitor. See Para. [0026]; no showing in *Von Bauer* of sending audio data (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18.”); *Von Bauer* is analog, not digital.

- ii. “a cellular telephone disposed in the possession of the homeowner and remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of doorway communications received from the control unit, thereby permitting the homeowner to monitor the home while away and the homeowner and individual to communicate as if the homeowner was at home” – *Sheynman* does not show that the cell phone renders the audio and video communications after the triggering event but before the owner establishes two way voice.
- b. *Menard* in view of *Xin* (*Sheynman* also mentioned in title of rejection but was not raised as part of substance of rejection)
 - i. “a video camera and an external microphone disposed in the doorway, the video camera and external microphonefor, when actuated, by the triggering event, capturing doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications” - *Xin* does not teach sending "doorway visual and audio communications at the doorway and transmitting the captured doorway visual and audio communications" after a triggering event; the *Xin* message is similar to that of *Menard* which Office Action agrees does not meet limitation.
 - ii. “the control unit for communicating at least one portion of the doorway visual and audio communications received from the video camera and external microphone” – no teaching of the *Menard* teaching that the LD comm module sends the “one portion of the doorway visual and audio communications received from the video camera and external microphone” captured after the triggering event but before the user of the remote device requests communications.
 - iii. “rendering the at least one portion of doorway communications received from the control unit” - *Menard* does not disclose that the cell phone "renders" the "at least one portion of doorway communications received from the control unit" captured upon the triggering event.

39. (Proposed Currently Amended) ~~The doorbell monitoring system of claim 38;~~

A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell [wherein the] a proximity detector located in an entry way, the actuation of the proximity detector being a [detects a person proximate to the entry point;

wherein the detection by the proximity detector of the person proximate to the entry point provides a second] triggering event; [and]

a video camera and an external microphone disposed in the entry way, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;

an external speaker disposed in the entry way, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, the proximity detector, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, and a microcontroller;

a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and the proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to display the entry point visual and audio communications on the video monitor;

wherein the control unit is configured to store the entry point visual and audio communications in a data storage unit of the control unit;

wherein the control panel is configured to allow an individual to manage a security system;

wherein the alarm system interface of the control panel is configured to interface with the security system;

wherein the entry point visual and audio communications are configured to be displayed by the video monitor in substantially realtime;

wherein the video camera is configured to collect the entry point visual and audio communications before the triggering event; and

wherein the video camera is configured to collect additional audio or video after the triggering event.

[wherein the video camera and the external microphone, responsive to the second triggering event, capture entry point visual and audio communications at the entry point and wirelessly stream the captured entry point visual and audio communications data to the control unit.]

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Proposed Amended Claims
D, E	Claim 38 a doorbell located in an entry way, the activation of the doorbell being a triggering event;	Claim 39 a doorbell <u>and a proximity detector located in an entry way, the actuation of the proximity detector being a triggering event;</u> located in an entry way, the activation of the doorbell being a triggering event;	56, 74, 91
<p>This proposed amendment addresses the purported issue with having two triggering events: ringing of the doorbell and the actuation of the proximity detectors.</p> <p>The proximity detector being a triggering event finds support in at least Col. 2, 35-44 (“In operation, an individual 34 approaches the doorway 18 and the proximity detector 26 is actuated. In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway ...”).</p>			
D, E	Claim 38 a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;	Claim 39 a control unit in communication with the video camera, the doorbell, <u>the proximity detector,</u> and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;	56, 74, 91
<p>This proposed amendment introduces a proximity detector in communication with the control unit for consistency with the triggering event now being the actuation of the proximity detector.</p> <p>The proximity detector being in communication with the control unit is disclosed at least in Fig. 3; Col. 2, ll. 35-44 (“... via a control unit that is in communication with the video camera 22, external microphone 24, proximity detector 26, and exterior speaker 28 as well as a cellular network for communicating with the cellular telephone”); and Col. 5 ll. 4-6 (“Numerous components are connected to the microcontroller 60; namely the video camera 22, the exterior microphone 24, and the proximity detector 26 of the communication unit 42.”)</p>			
D, E	Claim 38 wherein the doorbell, the video camera, the external microphone, the external speaker, and a	Claim 39 wherein the doorbell, the video camera, the external microphone, the external speaker, and <u>the[a]</u>	56, 74, 91

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Proposed Amended Claims
	proximity detector are part of a single communications unit;	proximity detector are part of a single communications unit;	
The proposed amendment above replaces “a proximity detector” with “ <u>the</u> proximity detector” as proximity detector has now been earlier introduced.			
All other amendments reflect the amendments made to claim 38.			

8. (Proposed Currently Amended) A method for providing doorbell monitoring, the method comprising:

- ringing of a doorbell at an entry point;
- responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;
- relaying at least a portion of the captured visual and audio communications to a cellular phone;
- rendering the least a portion of the captured visual and audio communications at the cellular phone;
- capturing audio communications at the cellular phone;
- relaying the audio communications from the cellular phone to the entry point;
- rendering the audio communications at the entry point via a communications unit;
- wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit;
- sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector [that is set within a predetermined range of detection and is less than an entire field of view of a camera];

receiving at the control unit a request to send additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point; [sending video communications before the proximity detector is actuated;] and

authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;

wherein the doorbell is part of the single communications unit which also comprises the camera, the proximity detector, a microphone, and a speaker.

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
B	Claim 8 ... sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera ...	Claim 8 ... sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera ...	116, 124
<p>This proposed amendment addresses the purported lack of support for predetermined range language as well as the entire field of view language. <i>See</i> OA at 12.</p> <p>This amendment finds written description support in at least Col. 2 ll. 35-44 (where actuation of the proximity detector initiating communication to the cellular telephone is described); Col. 4 ll. 51-56 (“The initial communication from the control unit portion 40 to the cellular telephone 30 may be considered a notification”).</p>			
C1	Claim 8 ... notifying a home security company when an emergency event occurs at the entry point; sending video communications before the proximity detector is actuated; ...	Claim 8 ... notifying a home security company when an emergency event occurs at the entry point; sending video communications before the proximity detector is actuated; ...	
<p>This proposed amendment addresses the purported lack of support for the language being canceled. <i>See</i> OA at 14.</p>			

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
This amendment finds written description support in at least Col. 5 ll. 45-48 (“notify a home security company or the police department in the instance of a break-in or other crime.”); Col. 7 ll. 54-59 (“Option 6: Notify Alarm Company allows the homeowner to notify the alarm company or alternatively the police department of a potential or actual problem.”).			

38. (Proposed Currently Amended) A doorbell monitoring system comprising:

- a doorway having an environment;
- a doorbell located in an entry way, the activation of the doorbell being a triggering event;
- a video camera and an external microphone disposed in the entry way, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry way and transmitting the captured visual and audio communications;
- an external speaker disposed in the entry way, the external speaker for rendering received audio communications;
- a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;
- a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point communications received from the control unit; and
- the control unit comprising a control panel, an alarm system interface, and a microcontroller[.];

[and] wherein a video monitor is communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor;

wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications in a data storage unit of the control unit;

wherein the control panel is configured to allow [capable of allowing] an individual to manage a security system;

wherein the alarm system interface of the control panel is configured to interface [capable of interfacing] with the security system;

wherein the entry point visual and audio communications are configured to be [capable of being] displayed by the video monitor [control unit] in substantially realtime;

wherein the video camera [control unit] is configured to collect [capable of receiving] the entry point visual and audio communications before the triggering event [actuation of the proximity detector located in the doorway or if the doorbell is pressed]; and

wherein the video camera [control unit] is configured to collect [capable of receiving] additional audio or video [from the video camera] after the triggering event.

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
A	Claim 38 ... the control unit comprising a control panel, an alarm system	Claim 38 ... the control unit comprising a control panel, an alarm system	73, 111, 113, 119,

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
	interface, a microcontroller, and a video monitor communicatively coupled to the microcontroller; ...	interface, <u>and</u> a microcontroller; and <u>wherein</u> a video monitor <u>is</u> communicatively coupled to the microcontroller; ...	121, 127, 129
<p>This proposed amendment addresses the purported lack of support for a control unit comprising a video monitor. <i>See</i> OA at 10-11.</p> <p>This amendment finds written description support in at least Col. 5 ll. 7-19 (“Further, the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74. ... A video monitor 76 is coupled to the microcontroller 60 as well as to the video camera 22 and the exterior microphone 24 through a multiplexer 78.”).</p>			
H	Claim 38 ... wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime; ...	Claim 38 ... wherein the entry point visual and audio communications are <u>configured to be</u> capable of being displayed by the <u>video monitor</u> control unit in substantially realtime; ...	73
<p>This proposed amendment addresses the purported lack of support for a control unit being able to display entry point visual and audio communication due to the purported lack of a video monitor. <i>See</i> OA at 19.</p> <p>This amendment finds written description support in at least Col. 5 ll. 57-60 (“The video monitor 76 is preferably located onsite at the home and renders in substantially realtime the visual and audio data collected by the video camera 22 and external microphone 24.”).</p>			
C1, C2	Claim 38 ... wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway if the doorbell is pressed; and wherein the control unit is capable of receiving additional audio or video from the video camera after the triggering event.	Claim 38 ... wherein the <u>video camera is configured to collect</u> control unit is capable of receiving the entry point visual and audio communications before <u>the triggering event</u> actuation of the proximity detector located in the doorway if the doorbell is pressed ; and wherein the <u>video camera is configured to collect</u> control unit is capable of receiving additional audio or video from the video camera after the triggering event.	55, 73, 90

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
<p>This proposed amendment addresses the purported lack of support for sending video and audio communications before the proximity detector is activated and sending video communications before the proximity detector is activated by canceling the problematic language. <i>See</i> OA at 13-14. Actuation of the proximity detector has been replaced with the triggering event, defined earlier in the claim as the doorbell. Furthermore, the limitation “control unit is capable of receiving” has been replaced with “video camera is configured to collect.”</p> <p>This amendment finds written description support in: Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”); Col. 3 ll. 6-8 (“a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.”); <i>see also</i> Col. 7 ll.36-45, Col. 7 ll. 31-45 (requesting and receiving additional data after the triggering event).</p> <p>Specifically, the added language of “video camera is configured to collect” is disclosed in at least Col. 3 ll. 6-8 (“the plurality of video cameras 22 collect video for the homeowner’s review irrespective of the occurrence of the triggering event”).</p>			

40. (Proposed Currently Amended) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to play [capable of playing] a pre-recorded message to a visitor at the entry point as well as capturing video before the triggering event [the proximity detector is triggered or the doorbell is triggered].

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
C1	Claim 40 The doorbell monitoring system of claim 38, wherein the single communications unit is capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before the proximity detector is triggered or the doorbell is triggered.	Claim 40 The doorbell monitoring system of claim 38, wherein the single communications unit is <u>configured to play</u> capable of playing a pre-recorded message to a visitor at the entry point as well as capturing video before <u>the triggering event</u> the proximity	41, 57, 75, 76, 92

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
		detector is triggered or the doorbell is triggered.	
<p>This proposed amendment addresses the purported lack of support for sending video and audio communications before the proximity detector is activated. <i>See</i> OA at 13.</p> <p>This amendment finds written description support in at least Col. 5 ll. 7-16; Col. 5 ll. 27-35 (“The OGM player/recorder 64 is a device for presenting pre-recorded messages to visitors”); Col. 6 ll. 52-55 (“Additionally, the homeowner may preprogram the control unit to play a pre-recorded message from the OGM player/recorder for the visitor if the call is disconnected or not answered and authenticated.”); Col. 7 ll. 22-35 (“Option 2: Play a Pre-Recorded Greeting”); Col. 3 ll. 6-8 (“a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.”).</p>			

45. (Proposed Currently Amended) The doorbell monitoring system of claim 38,
wherein the control unit is configured to display [capable of displaying] the entry point
visual and audio communications on the video monitor in substantially realtime; and
wherein the doorbell monitoring system is configured to authenticate [capable of
authenticating] a user of the system [; and
wherein the doorbell monitoring system is also capable of authentication of one or more
communications related to the doorbell monitoring system].

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
F	Claim 45 ... wherein the doorbell monitoring system is capable of authenticating a user of the system; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.	Claim 45 ... wherein the doorbell monitoring system is <u>configured to authenticate</u> capable of authenticating a user of the system.; and wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.	63, 80, 98

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
<p>This proposed amendment addresses the purported lack of support for authenticating the communication by canceling claim limitations. <i>See</i> OA at 17-18.</p> <p>This section finds written description support in at least Col. 6 ll. 39-55 (“At block 126, the identity of the homeowner is authenticated.”).</p>			

46. (Proposed Currently Amended) The doorbell monitoring system of claim 38,

wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the system;

wherein the doorbell is configured to record [capable of recording] video and audio before the [any type of] triggering event;

wherein the doorbell is also configured to transmit [capable of transmitting] video communications after detection by the proximity detector;

wherein the doorbell and the control panel are configured to communicate [capable of communicating] via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications data in the data storage unit of the control unit.

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
C3	Claim 46	Claim 46	64, 81, 99

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
	... wherein the doorbell is capable of recording video and audio before any type of triggering event; ...	... wherein the doorbell is <u>configured to record</u> capable of recording video and audio before <u>the</u> any type of triggering event; ...	
<p>This proposed amendment addresses the purported lack of clarity on what “any type” of triggering event is by specifying “the triggering event” which is defined in the independent claims as the doorbell. <i>See</i> OA at 15.</p> <p>This amendment finds written description support in at least Col. 3 ll. 6-8 (“a triggering event such as the ringing of a doorbell, initiates the contact of the control unit to the homeowner 16; however, the plurality of video cameras 22 collect video for the homeowner's review irrespective of the occurrence of the triggering event.”).</p>			

50. (Proposed Amended) The doorbell monitoring system of claim 49, wherein the two or more actions are at least two [one] of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
Other	Claim 50 The doorbell monitoring system of claim 49, wherein the two or more actions are at least one of ...	Claim 50 The doorbell monitoring system of claim 49, wherein the two or more actions are at least <u>two</u> one of ...	68, 85, 104
<p>This proposed amendment addresses the problem of “at least one of” actions fulfilling the requirement of “two or more actions” in the claim language. <i>See</i> OA at 20.</p> <p>This amendment finds written description support in at least Col 6 ll. 56-67; Col. 7 ll. 22-35; Col. 7 ll. 52-65; <i>see</i> also, Table 2.</p>			

52. (Proposed Amended) The doorbell monitoring system of claim 51 [38], wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
Other	Claim 52 The doorbell monitoring system of claim 38, wherein the stored video and audio communications are accessible ...	Claim 52 The doorbell monitoring system of claim <u>51</u> 38 , wherein the stored video and audio communications are accessible ...	70, 87, 106
<p>This proposed amendment addresses the problem with antecedent basis by claiming dependence to another dependent claim which provides a stored video and audio communications. <i>See</i> OA at 20.</p> <p>This amendment finds written description support in at least Col. 2 ll. 36-40 (“In turn, the video camera 22 and external microphone 24 capture visual and audio communications at the doorway 18. At least a portion of the data related to the captured doorway visual and audio communications is transmitted to the cellular telephone 30”); Col. 5 ll. 55-57 (“Moreover, data stored in the data storage unit 74 may be transferred to a different medium or played on the video monitor 76.”).</p>			

116. (Proposed Amended) A method for providing doorbell monitoring, the method comprising:

- ringing of a doorbell at an entry point;
- responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;
- relaying at least a portion of the captured visual and audio communications to a cellular phone;
- rendering the least a portion of the captured visual and audio communications at the cellular phone;
- capturing audio communications at the cellular phone;
- relaying the audio communications from the cellular phone to the entry point;
- rendering the audio communications at the entry point via a single communications unit;
- wherein the single communications unit is configured to wirelessly stream the visual and audio communications via a wireless connection;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector [that is set within a predetermined range of detection];

receiving at a control unit a request to send additional information regarding an event associated with the doorbell;

wirelessly streaming video communications from the single communications unit before the ringing of the doorbell at an entry point [proximity detector is actuated]; and

authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;

wherein the single communications unit also comprises a camera, the proximity detector, a microphone, and a speaker.

Grounds Addressed	Previously Presented	Proposed Amendment	Similar Amended Claims
C1	Claim 116 ... wirelessly streaming video communications from the single communications unit before the proximity detector is actuated ...	Claim 116 ... wirelessly streaming video communications from the single communications unit before the <u>ringing of the doorbell at an entry point</u> proximity detector is actuated ...	124
<p>This proposed amendment addresses the purported lack of support for sending video and audio communications before the proximity detector is activated. <i>See</i> OA at 13.</p> <p>This amendment finds written description support in at least Col. 6 ll. 21-24 (“This visual and audio data is rendered on the video monitor for individuals including the homeowner (if home) inside the home to digest. At block 116, the data is transferred to the control unit. This operation may occur substantially simultaneously with or even prior to the operations of block 114.”).</p> <p>Specifically, the added language of “ringing of the doorbell at an entry point” finds support in at least Col. 3 ll. 6-8 (“the plurality of video cameras 22 collect video for the homeowner’s review irrespective of the occurrence of the triggering event”).</p>			



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Title of Invention

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

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Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Zinser_Response_05162025.pdf	61	Amendment/Request for Reconsideration-After Non- Final Rejection	356 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Zinser_Response_05162025.pdf	7984C21EDEE6A346F90D72758B36DB9C91480683CB142E85C 47002B0EF3E88D2355AA46378F3CB27D17DA649B8A80F8E28 4FE0F1C2BBC5D19395885DEBC8DA45

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Owner/Assignee: Duke W. Zinser	§	
	§	Group Art Unit: 3992
Control No.: 90/019,542	§	
	§	Examiner: Ovidio Escalante
Filed: August 15, 2024	§	
	§	Confirmation: 4697
For: Security System and Method for	§	
Use of Same	§	

CERTIFICATE OF EFS-WEB FILING

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Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on May 16, 2025.

/Kirby Drake/
Kirby Drake

AMENDMENT AND RESPONSE TO NON-FINAL OFFICE ACTION

Patent Owner/Assignee acknowledges receipt of the Office Action in the Ex Parte Reexamination dated April 18, 2025 (the “Office Action” or “OA”). In response, Patent Owner/Assignee respectfully requests entry of the following amendments and consideration of the accompanying remarks.

Amendments to the Claims begin on page 2.

Remarks/Arguments begin on page 25.

Addendum begins on page 38.

AMENDMENTS TO THE CLAIMS

1. (Canceled)

8. (Twice Amended) A method for providing doorbell monitoring, the method comprising:

ringing of a doorbell at an entry point;

responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the at least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point; [and]

rendering the audio communications at the entry point[.] via a communications unit;

wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector;

receiving at the control unit a request to send additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point;
and

authenticating a homeowner before rendering the at least a portion of the captured visual and audio communications at the cellular phone;

wherein the doorbell is part of the communications unit which also comprises a camera, the proximity detector, a microphone, and a speaker.

14. (Canceled)

19. (Canceled)

21-37. (Canceled)

38. (New, Amended) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry point, activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the

cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, and a microcontroller;

a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to display the entry point visual and audio communications on the video monitor;

wherein the control unit is configured to store the entry point visual and audio communications in a data storage unit of the control unit;

wherein the control panel is configured to allow an individual to manage a security system;

wherein the alarm system interface of the control panel is configured to interface with the security system;

wherein the entry point visual and audio communications are configured to be displayed by the video monitor in substantially realtime;

wherein the video camera is configured to collect the entry point visual communications before the triggering event; and

wherein the video camera is configured to collect additional visual communications after the triggering event.

39. (Canceled)

40. (New, Amended) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to play a pre-recorded message to a visitor at the entry point.

41. (New, Amended) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

42. (New, Previously Presented) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

43-44. (Canceled)

45. (New, Amended) The doorbell monitoring system of claim 38,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime; and
wherein the doorbell monitoring system is configured to authenticate a user of the
doorbell monitoring system.

46. (New, Amended) The doorbell monitoring system of claim 38,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is configured to authenticate a user of the
doorbell monitoring system;
wherein the doorbell monitoring system is configured to record video before the
triggering event;

wherein the doorbell monitoring system is also configured to transmit video communications after detection by the proximity detector;

wherein the doorbell monitoring system is configured to communicate via a local area network that is separate and apart from a network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is configured to store the entry point visual and audio communications in the data storage unit of the control unit.

47. (Canceled).

48. (New, Amended) The doorbell monitoring system of claim 38, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

49. (New, Amended) The doorbell monitoring system of claim 38, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

50. (New, Amended) The doorbell monitoring system of claim 49, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

51. (New, Previously Presented) The doorbell monitoring system of claim 38, wherein the control unit further communicates captured visual and audio communications to an onsite

storage device and wherein the storage device stores the captured visual and audio communications.

52. (New, Amended) The doorbell monitoring system of claim 51, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

53. (New, Amended) The system of claim 51, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

54. (New, Previously Presented) The system of claim 51, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

55. (New, Amended) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point, activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio

communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store the entry point visual and audio communications captured by the single communications unit in a data storage unit of the control unit;

wherein the control panel is configured to allow an individual to manage a security system;

wherein an alarm system interface of the control panel is configured to interface with the security system;

wherein the video camera is configured to collect the entry point visual communications captured by the single communications unit before the triggering event;

wherein the video camera is configured to collect additional visual communications after the triggering event;

wherein the doorbell monitoring system is configured to establish communication with the control unit upon activation of the doorbell;

wherein at least a portion of an initial communication after the doorbell is activated is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

56. (Canceled)

57. (New, Amended) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

58. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

59-60. (Canceled).

61. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

62. (New, Previously Presented) The doorbell monitoring system of claim 61, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

63. (New, Amended) The doorbell monitoring system of claim 55,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

64. (New, Amended) The doorbell monitoring system of claim 55,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is configured to authenticate a user of the
doorbell monitoring system;
wherein the doorbell monitoring system is configured to record video before the
triggering event;
wherein the doorbell monitoring system is also configured to transmit video
communications after detection by the proximity detector;
wherein the doorbell monitoring system is configured to communicate via a local area
network that is separate and apart from a network used to transmit the entry point visual and
audio communications from the control unit to the cellular phone; and
wherein the control unit further comprises a data storage unit wherein the control unit is
configured to store the entry point visual and audio communications in the data storage unit of
the control unit.

65. (Canceled)

66. (New, Amended) The doorbell monitoring system of claim 55, wherein the control
unit is configured to generate a file that includes at least a portion of the entry point visual and
audio communications captured by the single communications unit.

67. (New, Amended) The doorbell monitoring system of claim 55, wherein the cellular
telephone comprises a user interface that allows user of the cellular telephone to take two or
more actions after receiving at least a portion of the entry point visual and audio communications
captured by the single communications unit.

68. (New, Amended) The doorbell monitoring system of claim 67, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

69. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

70. (New, Amended) The doorbell monitoring system of claim 69, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

71. (New, Amended) The system of claim 69, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

72. (New, Previously Presented) The system of claim 69, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

73. (New, Amended) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point, activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio

communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a data storage unit;

a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store the entry point visual and audio communications in a data storage unit of the control unit;

wherein the alarm system interface of the control panel is configured to interface with a security system;

wherein the entry point visual and audio communications are configured to be displayed by the video monitor in substantially realtime;

wherein the video monitor is configured to collect the entry point visual communications before the triggering event;

wherein the video camera is configured to collect additional visual communications after the triggering event; and

wherein a menu of options is provided to the user and at least one of the options are configured to be activated using a voice activation system.

74. (Canceled)

75. (New, Amended) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to play a pre-recorded message to a visitor at the entry point.

76. (New, Amended) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

77. (New, Previously Presented) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

78-79. (Canceled).

80. (New, Amended) The doorbell monitoring system of claim 73, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

81. (New, Amended) The doorbell monitoring system of claim 73,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is configured to authenticate a user of the
doorbell monitoring system;
wherein the doorbell monitoring system is configured to record video before the
triggering event;
wherein the doorbell monitoring system is also configured to transmit video
communications after detection by the proximity detector;
wherein the doorbell monitoring system is configured to communicate via a local area
network that is separate and apart from a network used to transmit the entry point visual and
audio communications from the control unit to the cellular phone; and
wherein the control unit further comprises a data storage unit wherein the control unit is
configured to store the entry point visual and audio communications in the data storage unit of
the control unit.

82. (Canceled)

83. (New, Amended) The doorbell monitoring system of claim 73, wherein the control
unit is configured to generate a file that includes at least a portion of the entry point visual and
audio communications captured by the single communications unit.

84. (New, Amended) The doorbell monitoring system of claim 73, wherein the cellular
telephone comprises a user interface that allows user of the cellular telephone to take two or
more actions after receiving at least a portion of the entry point visual and audio communications
captured by the single communications unit.

85. (New, Amended) The doorbell monitoring system of claim 84, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

86. (New, Previously Presented) The doorbell monitoring system of claim 73, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

87. (New, Amended) The doorbell monitoring system of claim 86, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

88. (New, Amended) The system of claim 86, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

89. (New, Previously Presented) The system of claim 86, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

90. (New, Amended) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point, activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point and transmitting the captured visual and audio

communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is configured to play a pre-recorded message to a visitor at the entry point and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;

wherein the video camera is configured to collect the entry point visual communications before the triggering event; and

wherein the video camera is configured to collect additional visual communications after the triggering event.

91. (Canceled)

92. (New, Amended) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

93. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

94-95. (Canceled)

96. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

97. (New, Previously Presented) The doorbell monitoring system of claim 96, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

98. (New, Amended) The doorbell monitoring system of claim 90,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime; and
wherein the doorbell monitoring system is configured to authenticate a user of the
doorbell monitoring system.

99. (New, Amended) The doorbell monitoring system of claim 90,
wherein the control unit is configured to display the entry point visual and audio
communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is configured to authenticate a user of the
doorbell monitoring system;

wherein the doorbell monitoring system is configured to record video before the triggering event;

wherein the doorbell monitoring system is also configured to transmit video communications after detection by the proximity detector;

wherein the doorbell monitoring system is configured to communicate via a local area network that is separate and apart from a network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is configured to store the entry point visual and audio communications in the data storage unit of the control unit.

100. (New, Amended) The doorbell monitoring system of claim 90, wherein the control unit further comprises a data storage unit wherein the control unit is configured to store the entry point visual and audio communications in the data storage unit of the control unit.

101. (Canceled)

102. (New, Amended) The doorbell monitoring system of claim 90, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

103. (New, Amended) The doorbell monitoring system of claim 90, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

104. (New, Amended) The doorbell monitoring system of claim 103, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video

and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

105. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

106. (New, Amended) The doorbell monitoring system of claim 105, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

107. (New, Amended) The system of claim 105, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

108. (New, Previously Presented) The system of claim 105, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

109. (New, Previously Presented) The method of claim 8, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

110. (New, Previously Presented) The method of claim 8 further comprising:
communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

111. (New, Amended) The method of claim 8, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller;
wherein a video monitor is communicatively coupled to the microcontroller.

112. (Canceled)

113. (New, Amended) The method of claim 8, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises
a switch, a control panel, an alarm system interface, and a microcontroller;
wherein a video monitor is communicatively coupled to the microcontroller.

114. (New, Previously Presented) The method of claim 8, further comprising:
providing an interface on the cellular phone that provides an option to request further
image or video data.

115. (New, Previously Presented) The method of claim 8, further comprising:
providing an interface that provides an option to notify an alarm company.

116. (New, Amended) A method for providing doorbell monitoring, the method
comprising:
ringing of a doorbell at an entry point;
responsive to the ringing of the doorbell, capturing visual and audio communications at
the entry point;
relaying at least a portion of the captured visual and audio communications to a cellular
phone;
rendering the least a portion of the captured visual and audio communications at the
cellular phone;

capturing audio communications at the cellular phone;
relaying the audio communications from the cellular phone to the entry point;
rendering the audio communications at the entry point via a single communications unit;
wherein the single communications unit is configured to wirelessly stream the visual and
audio communications via a wireless connection;
sending a notification as a first communication to the cellular phone when a visitor is
detected via a proximity detector;
receiving at a control unit a request to send additional information regarding an event
associated with the doorbell; and
authenticating a homeowner before rendering at least a portion of the captured visual and
audio communications at the cellular phone;
wherein the single communications unit also comprises a camera, the proximity detector,
a microphone, and a speaker.

117. (New, Previously Presented) The method of claim 116, wherein rendering at the
cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation
of a security system.

118. (New, Previously Presented) The method of claim 116, further comprising:
communicating at least a portion of the captured audio communications at the cellular
phone via a cellular network.

119. (New, Amended) The method of claim 116, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller;
wherein a video monitor is communicatively coupled to the microcontroller.

120. (Canceled)

121. (New, Amended) The method of claim 116, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller;
wherein a video monitor is communicatively coupled to the microcontroller.

122. (New, Previously Presented) The method of claim 116, further comprising:
providing an interface on the cellular phone that provides an option to request further image or video data.

123 (New, Previously Presented) The method of claim 116, further comprising:
providing an interface that provides an option to notify an alarm company.

124. (New, Amended) A method for providing doorbell monitoring, the method comprising:
ringing of a doorbell at an entry point;
responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;
relaying at least a portion of the captured visual and audio communications to a cellular phone;
rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;
relaying the audio communications from the cellular phone to the entry point;
rendering the audio communications at the entry point;
sending a notification as a first communication to the cellular phone when a visitor is
detected via a proximity detector;
wherein the doorbell is part of a single communications unit which also comprises a
camera, the proximity detector, a microphone, and a speaker;
wherein the camera is integrated into the doorbell;
sending from a control unit additional information regarding an event associated with the
doorbell;
notifying a home security company when an emergency event occurs at the entry point;
and
wirelessly streaming video communications after the ringing of the doorbell.

125. (New, Previously Presented) The method of claim 124, wherein rendering at the
cellular phone further comprises:
rendering a menu option that when selected would take no action based upon an actuation
of a security system.

126. (New, Previously Presented) The method of claim 124, further comprising:
communicating at least a portion of the captured audio communications at the cellular
phone via a cellular network.

127. (New, Amended) The method of claim 124, further comprising:

storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller;
wherein a video monitor is communicatively coupled to the microcontroller.

128. (Canceled)

129. (New, Amended) The method of claim 124, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises
a switch, a control panel, an alarm system interface, and a microcontroller;
wherein a video monitor is communicatively coupled to the microcontroller.

130. (New, Previously Presented) The method of claim 124, further comprising:
providing an interface on the cellular phone that provides an option to request further
image or video data.

131. (New, Previously Presented) The method of claim 124, further comprising:
providing an interface that provides an option to notify an alarm company.

PATENT OWNER'S STATEMENT OF THE INTERVIEW

Patent Owner/Assignee thanks the Examiners for the courtesy of the interview conducted on May 7, 2025. Patent Owner/Assignee agrees with the substance of the interview summary mailed on May 9, 2025 but provides this Statement in accordance with MPEP 2281. The interview addressed claims 8, 19, 38-40, 45-46, 50, 52, and 116. Claim 19 was discussed with respect to the 35 U.S.C. 103 rejections in the Office Action. The remaining claims were addressed in connection with the 35 U.S.C. 112 rejections in the Office Action though the substance of the proposed amendments to claims 8, 45, 52, and 116 were not specifically addressed during the interview as the Examiners had no further comments on the changes. While no other agreements were reached during the interview, the amendments and remarks herein are believed to address the Examiners' comments in the interview and place the claims in condition for allowance.

REMARKS

Patent Owner/Assignee requests entry of the amendments shown above. To facilitate the Examiners' review, attached hereto as Addendum is a listing of the claims shown above with only the changes made since the Office Action. In the event there is a discrepancy, the amendments shown above should control.

Claims 1, 14, 19, 21-37, 39, 43, 44, 47, 56, 59, 60, 65, 74, 78, 79, 82, 91, 94, 95, 101, 112, 120, and 128 have been cancelled.

Claims 8, 38, 40, 41, 45, 46, 48, 49, 50, 52, 53, 55, 57, 63, 64, 66, 67, 68, 70, 71, 73, 75, 76, 80, 81, 83, 84, 85, 87, 88, 90, 92, 98, 99, 100, 102, 103, 104, 106, 107, 111, 113, 116, 119, 121, 124, 127, and 129 has been amended for the reasons explained below.

Claims 42, 51, 54, 58, 61, 62, 69, 72, 77, 86, 89, 93, 96, 97, 105, 108, 109, 110, 114, 115, 117, 118, 122, 123, 125, 126, 130, and 131 remain unchanged except to the degree they include the limitations of any amendments in the claims from which they depend.

Written description support for any new amendments presented herein are provided in the below remarks.

Patent Owner/Assignee believes that all of the Pending Claims are in condition for allowance and requests that such claims be allowed and that a reexamination certificate be issued.

I. 35 U.S.C. § 103

The Examiners rejected claims 1 and 19 and their dependent claims 21-23, 25, 26, and 29-37 as unpatentable over prior art. Claims 1, 19, 21-23, 25, 26, and 29-37 have been canceled.

II. 35 U.S.C. § 112 – Written Description

The Examiners rejected claims 1, 8, and 21-131 as failing to comply with the written description requirement under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA). Several claims, including claims 1, 21-37, 43, 44, 47, 59, 60, 65, 78, 79, 82, 94, 95, 101, 112, 120, and 128 have been canceled. Other claims have been amended to overcome the rejections. To assist in review, where appropriate, an amendment from the previously presented claims is included in the below remarks. To the extent there is any discrepancy between amendments which appear below and the amendments to the claims presented above, the recitations of the amendments to the claims above controls.

A. Responding to Rejections under Section A (OA, p. 10)

Under Section A, the Examiners rejected claims 1, 21-54, 73-89, 111, 113, 119-121, 127, and 128 noting that “the control unit comprising ... a video monitor communicatively coupled to

the microcontroller” in claims 1, 38, 73, 111, 113, 119, 121, 127, and 129 was not supported by the specification.

Claim 1 has been canceled.

Independent claims 38 and 73 has been amended to address the rejection. For example, claim 38 is amended to:

the control unit comprising a control panel, an alarm system interface, and a microcontroller[,];
[and] a video monitor communicatively coupled to the microcontroller;

Claim 73 has been amended likewise. Claims 111, 113, 119, 121, 127, and 129 has also been amended to address the rejection. For example, claim 111 is amended to:

111. (New, Amended) The method of claim 8, further comprising:
storing at least a portion of the captured visual and audio communications by single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein[and] a video monitor is communicatively coupled to the microcontroller.

Claims 119 and 127 has been amended likewise. Further, claim 113 is amended to:

113. (New, Amended) The method of claim 8, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein[and] a video monitor is communicatively coupled to the microcontroller.

Claims 121 and 129 has been amended likewise.

These amendments address and overcome the Examiners’ rejections. The limitations above find written description support in at least Col. 5, ll. 7-19 (“Further, the components of the control unit 40 which are connected to the microcontroller 60 include a switch 62, an outgoing message (OGM) player/recorder 64, a control panel 66, an alarm system interface 68, a cellular network interface 70 having an antenna 72, and a data storage unit 74. ... A video monitor 76 is

coupled to the microcontroller 60 as well as to the video camera 22 and the exterior microphone 24 through a multiplexer 78.”).

B. Responding to Section B (OA, p. 12)

Under section B, the Examiners rejected claims 8 and 109-131. Specifically, independent claims 8, 116, and 124 each recite “a proximity detector that is set within a predetermined range of detection and is less than an entire field of view of a camera,” and the Examiners noted that the specification does not disclose of the setting of any range for detecting a visitor within the proximity detector’s range. OA at 12-13. Therefore, the limitation “that is set within a predetermined range of detection and is less than an entire field of view of a camera” has been deleted from claims 8, 116, and 124 to recite only a proximity detector.

C1. Responding to Section C1 (OA, p. 3)

Under section C1, the Examiners noted that the limitations “sending video communications before the proximity detector is actuated” in claim 8 and “wherein the control unit is capable of receiving the entry point visual and audio communications before actuation of the proximity detector located in the doorway or if the doorbell is pressed” in claim 38 are not disclosed in the specification. OA at 13. The Examiners also noted that claims 40, 41, 55, 57, 73, 75, 76, 90, 92, 112, 116, 120, and 124 also recite similar limitations. OA at 13. The Examiners presented several issues with written description support, ultimately concluding that the specification “does not provide clear support for sending video and audio communications before the proximity detector is activated.”

First, the Examiners noted that while the specification discloses that “video camera can collect video irrespective of the occurrence of the trigger event” the only explicit triggering event is the ringing of a doorbell. OA at 13. Second, while the Examiners acknowledged that “video

cameras can record before the ringing of the doorbell” the specification does not show any correlation as to whether “visual and audio communications are received by the control unit ‘before actuation of the proximity detector’.” OA at 13. Third, the Examiners noted that neither the specification at Col. 6 ll. 21-24 cited by Patent Owner/Assignee nor Fig. 5 showed “any reception of visual and audio data prior to the actuation of a proximity detector.” OA at 13-14.

Responding to these three rejections, first, claims 24, 28, 44, 47, 60, 79, and 112 have been canceled. Independent claims 38, 55, 73, and 90 have been amended to recite only one triggering event instead of “actuation of the proximity detector ... or if the doorbell is pressed.”

Second, independent claims 38, 55, 73, and 90 have also been amended to recite the video camera collecting video rather than the control unit receiving visual and audio communications. An example from claim 38 reflecting the amendments is shown below:

wherein the video camera [control unit] is configured to collect [capable of receiving] the entry point visual [and audio] communications before the triggering event [actuation of the proximity detector located in the doorway or if the doorbell is pressed]; and wherein the video camera [control unit] is configured to collect [capable of receiving] additional visual communications [audio or video from the video camera] after the triggering event.

Likewise, dependent claims 40, 57, 75, 76, and 92 have been amended to remove capturing video before the proximity detector is triggered or the doorbell is triggered. An example from claim 40 is shown below:

40. (Amended) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to play [capable of playing] a pre-recorded message to a visitor at the entry point [as well as capturing video before the proximity detector is triggered or the doorbell is triggered].

Finally, addressing the third rejection, independent claims 116 and 124 have been amended to remove the limitation of “wirelessly streaming video communications from the single communications unit before the proximity detector is actuated.”

Thus, Patent Owner/Assignee has fully addressed the Examiners' rejections and has overcome same through these amendments.

C2. Responding to Section C2 (OA, p. 14)

Under section C2, the Examiners noted that “ringing of the doorbell at an entry point; responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point; relaying at least a portion of the captured visual and audio communications to a cellular phone” with the added limitation “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector that is set within a predetermined range of detection that is less than an entire field of view of a camera”, then “sending video communications before the proximity detector is actuated” in claim 8 is not sufficiently supported by the specifications. OA at 14. The Examiners noted that “there is no clear single embodiment” which disclosed all of the above, specifically the events of ringing a doorbell, sending a notification, then having audio and visual communications be received by the control unit before the proximity detector is actuated. OA at 14. Ultimately, the Examiners noted that “the specification only discloses a single trigger for causing audio and video to be received by the control unit and provides no support for a second trigger.” OA at 15. Therefore, claim 8 has been amended to remove “sending video communications before the proximity detector is actuated.”

The Examiners also noted that while “claims 38, 55, 73 and 90 recite receiving visual and audio communication before the actuation of the proximity detector or the doorbell ... there is no clear support for the transmission of **audio** prior to the activation of either the proximity detector or the doorbell.” (emphasis added). OA at 14. This has been addressed above by amendments to the limitations which now recite “the video camera is configured to collect additional visual

communications” only.

The Examiners also noted during the interview that claim 46 also claimed a similar recording of video and audio before the triggering event. Claims 64, 81, and 99 also have the same limitations as claim 46. This has also been addressed by amending the limitations to recite only “video before the triggering event” as shown below in section C3.

C3. Responding to Section C3 (OA, p. 15)

Under section C3, the Examiners rejected claims 24, 28, 44, 46, 60, 64, 79, 81, 95, and 99 each reciting the limitation “wherein the doorbell is capable of recording visual and audio communications before any type of triggering event.” OA at 15. The Examiners found that the specification was not clear as to what “any type” is and that recording of visual and audio before “any type of triggering event” was not disclosed. Finally, the Examiners noted that the specification does not describe two events, one of them being the triggering of the doorbell as disclosed in the independent claims, triggering the sending of separate audio and video communications. Claims 24, 28, 44, 60, 79, and 95 have been canceled. The above-mentioned limitation in claims 46, 64, 81, and 99 has been amended to recite “the triggering event” which is the activation of the doorbell in the independent claims from which they depend. For example, claim 46 has been amended to recite:

wherein the doorbell monitoring system is configured to record [capable of recording] video [and audio] before the [any type of] triggering event;

(amendments adding “monitoring system” and changing “capable of recording” to “configured to record” are addressed below).

D. Responding to Section D (OA, p. 16)

Under section D, the Examiners rejected claims 21, 39, 56, 74, and 91. OA at 16. Specifically, the Examiners noted that 1) preceding claims already recited the doorbell as the

triggering event and 2) “specification does not disclose that in addition, to the actuation of the doorbell causing visual and audio communications to be recorded as well as being transmitted that a proximity detector can also have the same effect ...” OA at 16. Claims 21, 39, 56, 74, and 91 have been canceled, rendering this rejection moot.

E. Responding to Section E (OA, p. 17)

Under section E, the Examiners rejected claims 23, 24, 43, 44, 59, 60, 78, 79, 94, and 95 noting that the specification do not disclose “both ‘a triggering event’ and a ‘second triggering event’ in combination for capturing of additional visual and audio communications during each triggering event.” OA at 17. Claims 23, 24, 43, 44, 59, 60, 78, 79, 94, and 95 have been canceled, rendering this rejection moot.

F. Responding to Section F (OA, p. 17)

Under section F, the Examiners rejected claims 27, 45, 63, 80, and 98 noting that “wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system.” Specifically, the Examiners noted that while the specification discloses “authenticating the identity of a homeowner, there is no teaching of also authenticating of one or more communications related to the doorbell monitoring system.” OA at 17. Claim 27 has been canceled. In claims 45, 63, 80, and 98, the limitation “wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system” has been deleted from the claims which is believed to render this rejection moot.

G. Responding to Section G (OA, p. 15)

Under section G, the Examiners rejected claims 30, 47, 65, 82, and 101, noting that the specification does not “disclose allowing an individual to manage the alarm system using a

graphical user interface of the control panel.” OA at 18. Claims 30, 47, 65, 82, and 101 have been canceled, rendering this rejection moot.

H. Responding to Section H (OA, p. 19)

Under section H, the Examiners rejected claims 38-54 and 73-89 noting that while the claims recite “wherein the entry point visual and audio communications are capable of being displayed by the control unit in substantially realtime” the specification does not disclose *the control unit* capable of displaying any communications but rather it is *an external video monitor* which is connected to the control unit which is configured to display the communications. OA at 19. Therefore, claims 38 and 73 have been amended to recite a video monitor in place of a control unit.

III. Rejections under Section 112 - Indefiniteness

The Examiners rejected claims 33, 68, 85, and 104 for indefiniteness. Each of these claims recites “wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) no action.” OA at 19-20. Specifically, the Examiners noted that it was not clear how two or more actions include “no action” and suggested “changing no action to be a selection of no action.” OA at 20. Claim 33 has been canceled. Claims 68, 85, and 104 has been amended to recite “selection of no action” instead of “no action.”

The Examiners also noted that “‘two or more actions’ is covered by at least one (that is, can be only one) action.” OA at 20. However, read in context, with claims 67, 84, and 103 upon which each of claims 68, 85, and 104 claims depend, it is clear that “two or more actions” refers to two or more actions are actions that “a user interface allows user of a cellphone to take,” and

“at least one of” requires only that one of those two or more actions is the set of actions listed in claims 68, 85, and 104. By this amendment, the rejections of claims 68, 85, and 104 are believed to have been overcome.

Also, the Examiners rejected several claims each reciting the language “capable of.” OA at 20. Specifically, the Examiners found that the ““capable of” language relates to a future act that may never positively occur and is not recited to exist in the present tense” and suggested the use of “‘configured to’ as opposed to ‘capable of’.” *Id.* Therefore, all claims have amended to replace “capable of” with “configured to” with appropriate change to the subsequent verb. (i.e. “capable of receiving” to “configured to receive”).

Finally, the Examiners rejected claims 35, 52, 70, 87, and 106 noting that “the stored video and audio communications” had insufficient antecedent basis. OA at 20. Claim 35 has been canceled. Claims 52, 70, 87, and 106 have been amended to claim dependency to preceding dependent claims to establish proper antecedent basis for “the stored video and audio communications.” For example, claim 52 has been amended to depend from claim 51 which recites “wherein the storage device **stores** the captured **visual and audio communications.**” (emphasis added).

Therefore, Patent Owner/Assignee by cancellation of claims or by amendment respectfully submits that it has overcome all of the Section 112 rejections for indefiniteness in the Office Action.

Additional amendments have been made to address errors and additional issues raised in the examiner interview.

Claim 8 recited “rendering the least a portion of the captured visual and audio communications at the cellular phone”. This has been amended to read “rendering the at least a

portion of the captured visual and audio communications” for grammatical correctness. A corresponding change has also been made later in the claim to recite “authenticating a homeowner before rendering the at least a portion of the captured visual and audio communications at the cellular phone.”

The last limitation in claim 8 recited “the single communications unit” while earlier in the claim only “a communications unit” was recited. Therefore, “the single communications unit” has been amended to “the communications unit” for consistency.

Claims 48, 49, 66, 67, 83, 84, 102, and 103 recited “the communications unit” whereas independent claims 38, 55, 73, and 90 they depend from recited “a single communications unit.” Claim 55 also introduced “a single communications unit” but later recited “the communications unit.” Therefore, “the communications unit” in those claims have been amended to “the single communications unit” for consistency.

Claim 46, 64, 81, and 99 recited “wherein the doorbell is capable of recording”, “wherein the doorbell is also capable of transmitting”, and “wherein the doorbell and control panel are capable of communicating.” Based on the examiner interview, Patent Owner/Assignee understood that there may be an issue that the doorbell itself may not be recording, transmitting, or communicating. Therefore, these claims have been amended to recite “the doorbell monitoring system” instead of “doorbell.”

At least claims 41, 46, 50, 57, 64, 68, 76, 80, 85, 92, 99, 100, and 104 recited “visual and audio communications data” or “visual and/or audio communications data.” The word “data” was superfluous and inconsistent with how claims referred to the same as just “visual and audio communications”. Therefore, the word “data” has been removed from those claims to recite just “visual and audio communications” or “visual and/or audio communications.”

Claims 38, 55, 73, and 90 recited “entry way” while all other claims recite an “entry point”. The specification uses the word “entry point” throughout as well. *See e.g.*, Col 1, ll. 34-36; Col. 2, ll. 11-13 (“Referring initially to FIG. 1, therein is depicted an illustration of one embodiment of the security system 10 described herein being utilized at an entry point 12.”). Therefore, claims 38, 55, 73, and 90 has been amended to recite an “entry point” for consistency.

Claims 38, 55, 73, and 90 also recited “rendering the at least one portion of entry point communications”. This limitation has been amended to “rendering the at least one portion of entry point visual and audio communications” to clarify that the entry point communication is the entry point visual and audio communications referred to in the earlier parts of the claims.

Furthermore, claims 38, 55, 73, and 90 recited “a doorbell located in an entry point, the activation of the doorbell being a triggering event.” “Activation of the doorbell” is first introduced here, and there may be an antecedent basis issue. Therefore, “the” prior to “activation of the doorbell” has been deleted.

Claim 55 recited “actuation of the doorbell” and “doorbell is actuated” where in all other parts of the claim and in all other claims recite “activation of the doorbell.” Therefore, “actuation” and “actuated” has been amended to “activation” and “activated” for consistency.

Claim 55 also recited “wherein at least a portion of the initial communication after the doorbell.” “Initial communication” is first introduced here and there may have been an antecedent basis issue. Therefore, “the” prior to “initial communication” has been replaced with “an.”

Claims 45, 46, 63, 64, 80, 81, 98, and 99 recited “wherein the doorbell monitoring system is configured to authenticate a user of the system;”. The limitation has been amended to “wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring

system” to clarify that the system is the doorbell monitoring system.

Claims 46, 64, 81, and 99 recited “wherein the doorbell monitoring system is configured to communicate via a local area network that is separate and apart from the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone.” There may not have been antecedent basis for “the network used to transmit the entry point visual and audio communications from the control unit to the cellular phone.” Therefore “the network” has been amended to “a network.”

IV. Conclusion

In light of the amendments herein and the explanations set forth above, Patent Owner/Assignee requests that the Pending Claims be allowed. To the extent that the Pending Claims are not considered to be in condition for allowance, Patent Owner/Assignee hereby requests an interview regarding the Pending Claims in order to expedite allowance of same. Patent Owner/Assignee respectfully invites the Examiners to contact the undersigned at the telephone number indicated below or at kirby@kirbydrakelaw.com.

Respectfully submitted,

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ADDENDUM

1. (Canceled)

8. (Twice Amended) A method for providing doorbell monitoring, the method comprising:

ringing of a doorbell at an entry point;

responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the at least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point via a communications unit;

wirelessly streaming the visual and audio communications via a wireless connection from the communications unit to a control unit;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector [that is set within a predetermined range of detection and is less than an entire field of view of a camera];

receiving at the control unit a request to send additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point; [sending video communications before the proximity detector is actuated;] and

authenticating a homeowner before rendering the at least a portion of the captured visual and audio communications at the cellular phone;

wherein the doorbell is part of the[single] communications unit which also comprises [the] a camera, the proximity detector, a microphone, and a speaker.

19. (Canceled)

21-37. (Canceled)

38. (Amended) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry point[way], [the] activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point[way], the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point[way] and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point[way], the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the

cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, and a microcontroller[,];

[and] a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor;

wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications in a data storage unit of the control unit;

wherein the control panel is configured to allow [capable of allowing] an individual to manage a security system;

wherein the alarm system interface of the control panel is configured to interface [capable of interfacing] with the security system;

wherein the entry point visual and audio communications are configured to be [capable of being] displayed by the video monitor [control unit] in substantially realtime;

wherein the video camera [control unit] is configured to collect [capable of receiving] the entry point visual [and audio] communications before the triggering event [actuation of the proximity detector located in the doorway or if the doorbell is pressed]; and

wherein the video camera[control unit] is configured to collect [capable of receiving] additional visual communications [audio or video from the video camera] after the triggering event.

39. (Canceled)

40. (Amended) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to play [capable of playing] a pre-recorded message to a visitor at the entry point [as well as capturing video before the proximity detector is triggered or the doorbell is triggered].

41. (Amended) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications [data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user].

42. (Previously Presented) The doorbell monitoring system of claim 38, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

43-44. (Canceled)

45. (Amended) The doorbell monitoring system of claim 38,
wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime; and

wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system [; and

wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system].

46. (Amended) The doorbell monitoring system of claim 38,
wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system;
wherein the doorbell monitoring system is configured to record [capable of recording] video [and audio] before the [any type of] triggering event;
wherein the doorbell monitoring system is also configured to transmit [capable of transmitting] video communications after detection by the proximity detector;
wherein the doorbell monitoring system is [and the control panel are] configured to communicate [capable of communicating] via a local area network that is separate and apart from a[the] network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and
wherein the control unit further comprises a data storage unit wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications [data] in the data storage unit of the control unit.

47. (Canceled).

48. (Amended) The doorbell monitoring system of claim 38, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

49. (Amended) The doorbell monitoring system of claim 38, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or

more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

50. (Amended) The doorbell monitoring system of claim 49, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications [data], (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

51. (Previously Presented) The doorbell monitoring system of claim 38, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

52. (Amended) The doorbell monitoring system of claim 51 [38], wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

53. (Amended) The system of claim 51, wherein the onsite storage device is configured to provide [capable of providing] the additional device with access to the stored video and audio communications in substantially realtime.

54. (Previously Presented) The system of claim 51, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

55. (Amended) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point [way], [the] activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry point [way], the video

camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point [way] and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point [way], the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications captured by the single communications unit in a data storage unit of the control unit;

wherein the control panel is configured to allow [capable of allowing] an individual to manage a security system;

wherein an alarm system interface of the control panel is configured to interface [capable of interfacing] with the security system;

wherein the video camera [control unit] is configured to collect [capable of receiving] the entry point visual [and audio] communications captured by the single communications unit before the triggering event[actuation of the proximity detector located in the doorway or if the doorbell is pressed];

wherein the video camera[control unit] is configured to collect [capable of receiving] additional visual communications [audio or video from the video camera] after the triggering event[actuation of the proximity detector];

wherein the doorbell monitoring system is configured to establish [capable of establishing] communication with the control unit upon activation [actuation] of the doorbell;

wherein at least a portion of an [the] initial communication after the doorbell is activated[actuated] is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system.

56. (Canceled)

57. (Amended) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications [data and further capable of capturing audio and video communications before the proximity detector is triggered or the doorbell is pressed by a user].

58. (Previously Presented) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

59-60. (Canceled).

61. (Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

62. (Previously Presented) The doorbell monitoring system of claim 61, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

63. (Amended) The doorbell monitoring system of claim 55,
wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime; and
wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system [; and
wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system].

64. (Amended) The doorbell monitoring system of claim 55,
wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime;
wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system;
wherein the doorbell monitoring system is configured to record [capable of recording] video [and audio] before the[any type of] triggering event;
wherein the doorbell monitoring system is also configured to transmit [capable of transmitting] video communications after detection by the proximity detector;

wherein the doorbell monitoring system is [and the control panel are] configured to communicate [capable of communicating] via a local area network that is separate and apart from a [the] network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications [data] in the data storage unit of the control unit.

65. (Canceled)

66. (Amended) The doorbell monitoring system of claim 55, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

67. (Amended) The doorbell monitoring system of claim 55, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

68. (Amended) The doorbell monitoring system of claim 67, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications [data], (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

69. (Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

70. (Amended) The doorbell monitoring system of claim 69 [55], wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

71. (Amended) The system of claim 69, wherein the onsite storage device is configured to provide [capable of providing] the additional device with access to the stored video and audio communications in substantially realtime.

72. (Previously Presented) The system of claim 69, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

73. (Amended) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry point [way], [the] activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point [way], the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point [way] and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point [way], the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

the control unit comprising a control panel, an alarm system interface, a microcontroller, and a data storage unit[:]

[and] a video monitor communicatively coupled to the microcontroller;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications in a data storage unit of the control unit;

wherein the alarm system interface of the control panel is configured to interface [capable of interfacing] with a security system;

wherein the entry point visual and audio communications are configured to be [capable of being] displayed by the video monitor [control unit] in substantially realtime;

wherein the video monitor [control unit] is configured to collect [capable of receiving] the entry point visual [and audio] communications before the triggering event [actuation of the proximity detector located in the doorway or if the doorbell is pressed];

wherein the video camera [control unit] is configured to collect [capable of receiving] additional visual communications [audio or video from the video camera] after the triggering event; and

wherein a menu of options is provided to the user and at least one of the options are configured to be [capable of being] activated using a voice activation system.

74. (Canceled)

75. (Amended) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to play [capable of playing] a pre-recorded message to a visitor at the entry point [as well as capturing video before proximity detector is triggered or the doorbell is triggered].

76. (Amended) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications [data and further capable of capturing audio and video communications before proximity detector is triggered or the doorbell is pressed by a user].

77. (Previously Presented) The doorbell monitoring system of claim 73, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

78-79. (Canceled).

80. (Amended) The doorbell monitoring system of claim 73,
wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime; and
wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system [; and
wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system].

81. (Amended) The doorbell monitoring system of claim 73,

wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system;

wherein the doorbell monitoring system is configured to record [capable of recording] video [and audio] before the [any type of] triggering event;

wherein the doorbell monitoring system is also configured to transmit [capable of transmitting] video communications after detection by the proximity detector;

wherein the doorbell monitoring system is [and the control panel are] configured to communicate [capable of communicating] via a local area network that is separate and apart from a [the] network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications [data] in the data storage unit of the control unit.

82. (Canceled)

83. (Amended) The doorbell monitoring system of claim 73, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

84. (Amended) The doorbell monitoring system of claim 73, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

85. (Amended) The doorbell monitoring system of claim 84, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications [data], (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

86. (Previously Presented) The doorbell monitoring system of claim 73, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

87. (Amended) The doorbell monitoring system of claim 86 [73], wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

88. (Amended) The system of claim 86, wherein the onsite storage device is configured to provide [capable of providing] the additional device with access to the stored video and audio communications in substantially realtime.

89. (Previously Presented) The system of claim 86, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

90. (Amended) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point [way], [the] activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point [way], the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point [way] and transmitting the captured visual and audio

communications;

an external speaker disposed in the entry point [way], the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is configured to play [capable of playing] a pre-recorded message to a visitor at the entry point [way] and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;

wherein the video camera [control unit] is configured to collect [capable of receiving] the entry point visual [and audio] communications before the triggering event [actuation of a proximity detector located in the doorway or if the doorbell is pressed]; and

wherein the video camera [control unit] is configured to collect [capable of receiving] additional visual communications [audio or video from the video camera] after the triggering event [actuation of the proximity detector].

91. (Canceled)

92. (Amended) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications [data and further capable of capturing audio and video communications before proximity detector is triggered or the doorbell is pressed by a user].

93. (Previously Presented) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

94-95. (Canceled)

96. (Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

97. (Previously Presented) The doorbell monitoring system of claim 96, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

98. (Amended) The doorbell monitoring system of claim 90,
wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime; and
wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system [; and
wherein the doorbell monitoring system is also capable of authentication of one or more communications related to the doorbell monitoring system].

99. (Amended) The doorbell monitoring system of claim 90,

wherein the control unit is configured to display [capable of displaying] the entry point visual and audio communications on the video monitor in substantially realtime;

wherein the doorbell monitoring system is configured to authenticate [capable of authenticating] a user of the doorbell monitoring system;

wherein the doorbell monitoring system is configured to record [capable of recording] video [and audio] before the [any type of] triggering event;

wherein the doorbell monitoring system is also configured to transmit [capable of transmitting] video communications after detection by the proximity detector;

wherein the doorbell monitoring system is [and the control panel are] configured to communicate [capable of communicating] via a local area network that is separate and apart from a [the] network used to transmit the entry point visual and audio communications from the control unit to the cellular phone; and

wherein the control unit further comprises a data storage unit wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications [data] in the data storage unit of the control unit.

100. (Amended) The doorbell monitoring system of claim 90, wherein the control unit further comprises a data storage unit wherein the control unit is configured to store [capable of storing] the entry point visual and audio communications [data] in the data storage unit of the control unit.

101. (Canceled)

102. (Amended) The doorbell monitoring system of claim 90, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

103. (Amended) The doorbell monitoring system of claim 90, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

104. (Amended) The doorbell monitoring system of claim 103, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications [data], (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

105. (Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

106. (Amended) The doorbell monitoring system of claim 105 [90], wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

107. (Amended) The system of claim 105, wherein the onsite storage device is configured to provide [capable of providing] the additional device with access to the stored video and audio communications in substantially realtime.

108. (Previously Presented) The system of claim 105, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

109. (Previously Presented) The method of claim 8, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation

of a security system.

110. (Previously Presented) The method of claim 8 further comprising:
communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

111. (Amended) The method of claim 8, further comprising:
storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein [and] a video monitor is communicatively coupled to the microcontroller.

112. (Canceled)

113. (Amended) The method of claim 8, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein [and] a video monitor is communicatively coupled to the microcontroller.

114. (Previously Presented) The method of claim 8, further comprising:
providing an interface on the cellular phone that provides an option to request further image or video data.

115. (Previously Presented) The method of claim 8, further comprising:
providing an interface that provides an option to notify an alarm company.

116. (Amended) A method for providing doorbell monitoring, the method comprising:
ringing of a doorbell at an entry point;
responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point via a single communications unit;

wherein the single communications unit is configured to wirelessly stream the visual and audio communications via a wireless connection;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector [that is set within a predetermined range of detection];

receiving at a control unit a request to send additional information regarding an event associated with the doorbell;

[wirelessly streaming video communications from the single communications unit before the proximity detector is actuated]; and

authenticating a homeowner before rendering at least a portion of the captured visual and audio communications at the cellular phone;

wherein the single communications unit also comprises a camera, the proximity detector, a microphone, and a speaker.

117. (Previously Presented) The method of claim 116, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

118. (Previously Presented) The method of claim 116, further comprising:
communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

119. (Amended) The method of claim 116, further comprising:
storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein [and] a video monitor is communicatively coupled to the microcontroller.

120. (Canceled)

121. (Amended) The method of claim 116, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein [and] a video monitor is communicatively coupled to the microcontroller.

122. (Previously Presented) The method of claim 116, further comprising:
providing an interface on the cellular phone that provides an option to request further image or video data.

123 (Previously Presented) The method of claim 116, further comprising:
providing an interface that provides an option to notify an alarm company.

124. (Amended) A method for providing doorbell monitoring, the method comprising:
ringing of a doorbell at an entry point;
responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point;

relaying at least a portion of the captured visual and audio communications to a cellular phone;

rendering the least a portion of the captured visual and audio communications at the cellular phone;

capturing audio communications at the cellular phone;

relaying the audio communications from the cellular phone to the entry point;

rendering the audio communications at the entry point;

sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector [that is set within a predetermined range of detection];

wherein the doorbell is part of a single communications unit which also comprises a camera, the proximity detector, a microphone, and a speaker;

wherein the camera is integrated into the doorbell;

sending from a control unit additional information regarding an event associated with the doorbell;

notifying a home security company when an emergency event occurs at the entry point;

[wirelessly streaming video communications before the proximity detector is actuated];

and

wirelessly streaming video communications after the ringing of the doorbell [proximity detector is actuated].

125. (Previously Presented) The method of claim 124, wherein rendering at the cellular phone further comprises:

rendering a menu option that when selected would take no action based upon an actuation of a security system.

126. (Previously Presented) The method of claim 124, further comprising:
communicating at least a portion of the captured audio communications at the cellular phone via a cellular network.

127. (Amended) The method of claim 124, further comprising:
storing at least a portion of the captured visual and audio communications by the single communications unit at the control unit located locally to the entry point wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein [and] a video monitor is communicatively coupled to the microcontroller.

128. (Canceled)

129. (Amended) The method of claim 124, further comprising:
activating an alarm system interface via a control unit, wherein the control unit comprises a switch, a control panel, an alarm system interface, and a microcontroller[,];
wherein [and] a video monitor is communicatively coupled to the microcontroller.

130. (Previously Presented) The method of claim 124, further comprising:
providing an interface on the cellular phone that provides an option to request further image or video data.

131. (Previously Presented) The method of claim 124, further comprising:
providing an interface that provides an option to notify an alarm company.

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 90/019,542		Filing Date 08/15/2024		☐ To be Mailed		
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO										
APPLICATION AS FILED - PART I										
FOR		(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE (\$)		FEE (\$)				
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A	N/A						
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))		N/A	N/A	N/A						
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A	N/A						
TOTAL CLAIMS (37 CFR 1.16(i))		20 minus 20 =	* 0	x \$40 =		0				
INDEPENDENT CLAIMS (37 CFR 1.16(h))		3 minus 3 =	* 0	x \$ 192 =		0				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL		0				
APPLICATION AS AMENDED - PART II										
AMENDMENT	11/11/2024	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	* 130	Minus	** 20	= 110	x \$40 =		4400		
	Independent (37 CFR 1.16(h))	* 9	Minus	*** 3	= 6	x \$ 192 =		1152		
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE		5552		
AMENDMENT	05/16/2025	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	* 79	Minus	** 130	= 0	x \$ 80 =		0		
	Independent (37 CFR 1.16(h))	* 9	Minus	*** 9	= 0	x \$ 240 =		0		
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE		0		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.						LIE				
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".						/PATRICIA F LEWIS/				
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ESCALANTE, OVIDIO

ART UNIT	PAPER NUMBER
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3992

MAIL DATE	DELIVERY MODE
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06/16/2025

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This office action is in response to the Patent Owner's response filed on May 16, 2025.
2. As set forth in the Patent Owner's response, claims 1, 14, 19, 21-37, 39, 43, 44, 47, 56, 59, 60, 65, 74, 78, 79, 82, 91, 94, 95, 101, 112, 120 and 128 have been canceled and claims 8, 38, 40, 41, 45, 46, 48-50, 52, 53, 55, 57, 63, 64, 66-68, 70, 71, 73, 75, 76, 80, 81, 83-85, 87, 88, 90, 92, 98-100, 102-104, 106, 107, 111, 113, 116, 119, 121, 124, 127, and 129 have been amended.

Status of the Claims

3. Original claims 1, 14 and 19 are canceled.

Original claims 2-7, 9-13, 15-18 and 20 are not subject to reexamination.

Amended original claim 8 is rejected.

New claims 38, 40, 41, 42, 45, 46, 48-54, 64, 73, 75-77, 80, 81, 83-89, 99, 109, 113-119, 121-127, and 129-131 are rejected.

New claims 55, 57, 58, 61-63, 66-72, 90, 92, 93, 96-98, 100, and 102-108 are allowable.

Claim Interpretation

4. As per MPEP 2258(G), Original patent claims will be examined only on the basis of prior art patents or printed publications applied under the appropriate parts of 35 U.S.C. 102 and 103 in reexaminations ordered under 35 U.S.C. 304. See MPEP § 2217. During reexamination ordered under 35 U.S.C. 304, and also during reexamination ordered under 35 U.S.C. 257, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims (*In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984)). In a reexamination proceeding involving claims of an expired patent, claim construction pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim "are generally given their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention) should be applied since the expired claim are not subject to amendment. See *Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter.

1986). The statutory presumption of validity, 35 U.S.C. 282, has no application in reexamination (*In re Etter*, 756 F.2d 852, 225 USPQ 1 (Fed. Cir. 1985)).

Response to Arguments

35 U.S.C. 103

The Patent Owner states that the Examiner rejected claims 1 and 19 and their dependent claims 21-23, 25, 26, and 29-37. The Examiner notes that in response to the previous office action, the Patent Owner has cancelled claims 1, 19, 21-23, 25, 26, and 29-37.

Therefore, the previous prior art rejections are now moot in view of the cancelation of those claims.

35 U.S.C. 112 – Written Description

The Examiner notes that in view of the 112 1st rejections as set forth in the previous non-final office action, the Patent Owner has canceled several claims and have amended others. In view of the Patent Owner's response as set forth on pages 26-33 as it pertains to 112 1st paragraph, the Examiner finds that the Patent Owner has overcome the previous rejection. Therefore, the 112 1st paragraph rejections as set forth in the previous office action, will be withdrawn. It is noted that for the reasons set forth below, in view of the current amendments, new grounds for rejection under 35 U.S.C. 112 first paragraph have been set forth.

35 U.S.C. 112 – Indefiniteness

The Patent Owner states that with respect to claims 67, 84, and 103, upon which each of claims 68, 85, and 104 depend upon, when read into context, it is clear that “two or more actions” refers to two or more actions are actions that “a user interface allows user of a cellphone to take,” and “at least one of” requires only that one of those two or more actions is the set of actions listed in claims 68, 85, and 104.

The Examiner notes that claim 67, for example, recites “wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions...” The Examiner

finds that the claim requires the user “**to take** two or more actions” and thus claims 67 and 68 require two or more actions to be taken. Thus, claim 68, 85 and 104 is not clear since they each recites “at least one of” and thus precludes taking two or more actions.

The Examiner notes that in view of the Patent Owner’s arguments, the claim can be amended to recite a user interface that presents/displays to the user of the cellular telephone two or more actions or that the user interface allows the user of the cellular telephone to select from two or more actions. Then in either of these two scenarios, the user can select at least one action from the two or more actions (as recited in claims 68, 85, and 104).

Therefore, as currently, recited, the Patent Owner has not overcome the 112 2nd paragraph rejection of claims 67, 85 and 104.

The Examiner further notes that the Patent Owner has addressed the other 112 2nd paragraph issues with respect to other claims as set forth in the non-final office action. In view of the amendment/cancellations of those claims, the Patent Owner has overcome the 112 2nd paragraph rejection for those claims.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 8, 38, 40-42, 45, 46, 48-54, 64, 73, 75-77, 80, 81, 83-89, 99, 109-111, 113-131 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the

written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for applications subject to pre-AIA 35 U.S.C. 112, the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding **claim 38** (including dependent claims 40-42, 45, 46, 48-54) **and claim 73** (including dependent claims 75-77, 80-81, and 83-89), the claims recite “wherein the entry point visual and audio communications are configured to be displayed by the video monitor in substantially realtime”.

The Examiner finds that the patent specification does not support a video monitor “displaying” **audio** communications. The Examiner does find that the specification discloses of a video monitor ‘rendering’ audio and visual communication (col. 5, lines 57-60) or “played” on the video monitor (col. 5, lines 55-57).

With respect to **claims 46, 64, 81 and 99**, the claim recites “wherein the doorbell monitoring system is also configured to transmit video communications after detection by the proximity detector”. The Examiner finds that each of claims 38, 55, 73 and 90 recite “responsive to the triggering event [activation of the doorbell], for capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications.”

Thus, each of these claims recite the capturing and transmission of visual and audio communication responsive to the activation of a doorbell. Each of claims 46, 64, 81 and 99 each further recite the doorbell monitoring system being also configured to “to transmit video communications after detection by the proximity detector”.

The Examiner acknowledges that the doorbell monitoring system includes both a doorbell and a proximity detector, however, the specification does not describe a single

embodiment in which audio and visual communication are transmitted for the doorbell and separately from the proximity detector in a single embodiment.

Therefore, the Examiner finds that dependent claims 46, 64, 81 and 99 when used in combination with the activation of the doorbell for the transmission of audio and visual communication is not supported by the specification.

Regarding **claims 8** (including dependent claims 109-111, and 113-115), **116** (including dependent claims 117-123) **and 124** (including dependent claims 125-131), each claim recites “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector”.

The Examiner finds that claims 8, 116, and 124 each recite the “responsive to the ringing of the doorbell, capturing visual and audio communications at the entry point; relaying at least a portion of the captured visual and audio communications to a cellular phone”. The limitation “sending a notification as a first communication to the cellular phone when a visitor is detected via a proximity detector” includes an additional (or first notification) that is provided responsive to detection by a proximity detector. The Examiner finds that the specification, describes functions associated with the activation of a doorbell and functions associated with the triggering of a proximity detector. However, the specification does not describe the use of both a doorbell and a proximity detector in the same embodiment. That is, the sending of a first notification to a cellular phone when a visitor is detected via a proximity detector and then subsequently triggering a doorbell which causes relaying of at least a portion of audio and visual communications to a cellular phone in the same embodiment.

7. Claims 68, 85, and 104 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which the inventor or a joint inventor (or for applications subject to pre-AIA 35 U.S.C. 112, the applicant), regards as the invention.

Claims 68, 85 and 104 each recite “wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications data, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.”

The Examiner notes that this claim is not clear since the preceding base claim requires the “user of the cellular telephone to take two or more actions” and the instant claims requires “two or more actions are at least one of”. That is, it is not clear how two actions can be taken (as recited by the previous base claim) while requiring “at least one” action to be taken.

STATEMENT OF REASONS FOR PATENTABILITY AND/OR CONFIRMATION

8. The following is an examiner's statement of reasons for patentability and/or confirmation of the claims found patentable in this reexamination proceeding:

Regarding **claim 55** (including dependent claims 57, 58, 61, 62, 63, and 66-72) and **claim 90** (including dependent claims 90, 92, 93, 96-98, 100, and 102-108), the Examiner finds these claims allowable over the relied upon prior art combinations.

The Examiner notes that claim 55 is directed to a doorbell monitoring system which in response to activation of a doorbell, visual and audio communications at an entry point are captured and transmitted. The claim further recites a cellular telephone for rendering at least one portion of the entry point visual and audio communications received from a control unit.

With respect to Menard, Klein and Von Bauer, the Examiner finds that Menard discloses the transmission of a signal in response to the actuation of a doorbell. Menard does not specifically disclose of a control panel being configured to allow an individual to manage a security system or where a video camera is configured to collect the entry point visual

communications captured by the single communication unit before the triggering event or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system in combination with the rest of the limitation of the claim.

In addition, neither Von Bauer nor Klein disclose a control panel being configured to allow an individual to manage a security system or where a video camera is configured to collect the entry point visual communications captured by the single communication unit before the triggering event or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system in combination with the rest of the limitations of the claim. The Examiner finds that although Menard, Klein and von Bauer discloses of actuation of a doorbell and transmission of signals responsive to the actuation of the doorbell, neither Menard nor von Bauer further disclose the capturing of the visual communication prior to the activation of the doorbell.

With respect to Sheynman, Hershkovitz and Xin, the Examiner finds that the teachings show a doorbell monitoring system in which a portion of audio and visual communications are transmitted to a cellular user. The Examiner finds that in view of the claims, Sheynman, Hershkovitz and Xin do not disclose of a video camera being configured to collect the entry point visual communication captured by a single communication unit before the triggering event where the triggering event is the activation of a doorbell which is configured to capture and transmit visual and audio communications at the entry point or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system. The Examiner notes that Xin discloses of capturing visual communications, without the activation of a doorbell, however, Xin does not disclose of both doorbell activation for the capturing and transmission of

visual and audio communication in combination with also capturing the visual images prior to the activation of a doorbell.

The Examiner finds that with respect to claim 90, similar to claim 55, the claim recites both the capturing and transmission of visual and audio communications at the entry point in response to an activation of a doorbell in combination with a video camera being configured to collect the entry point visual communications before the triggering event. Therefore, for this same reason as set forth above in claim 55, the relied upon prior art of record do not teach the limitations set forth in claim 90.

In addition, the Examiner finds that upon correction of the 112 1st paragraph issue with respect to claims **claim 38** (including dependent claims 40-42, 45, 48-54) **and claim 73** (including dependent claims 75-77, 80, and 83-89) by using an alternative language as opposed to “displaying” as explained above, these claims would likewise be indicated as being allowable over the prior art of record¹.

The Examiner finds that claim 38 and 73 recite similar limitations as set forth above with respect to either claim 55 or 90.

Any comments considered necessary by PATENT OWNER regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the patent owner should be labeled: "Comments on Statement of Reasons for Patentability and/or Confirmation" and will be placed in the reexamination file.

¹ The Examiner notes that dependent claim 46 (dependent on claim 38) and dependent claim 81 (dependent on claim 73) are excluded since they are listed under an additional 112 1st paragraph rejection as set forth above.

Conclusion

9. Patent owner's amendment filed May 16, 2025 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

A shortened statutory period for response to this action is set to expire **TWO MONTHS** from the mailing date of this action.

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination proceedings. The provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings "will be conducted with special dispatch within the Office."

Extensions of time in reexamination proceedings are provided for in 37 CFR 1.550(c). A request for extension of time must specify the requested period of extension and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g)(1). Any request for an extension in a third party requested ex parte reexamination must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request will not effect any extension of time. A request for an extension of time in a third party requested ex parte reexamination will be granted only for sufficient cause, and for a reasonable time specified. Any request for extension in a patent owner requested ex parte reexamination (including reexamination ordered under 35 U.S.C. 257) for up to two months from the time period set in the Office action must be filed no later than two months from the expiration of the time period set in the Office action. A request for an extension in a patent owner requested ex parte reexamination for more than two months from the time period set in the Office action must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request for an extension for more than two months will not effect the extension. The time for taking action in a patent owner requested ex parte reexamination will not be extended for more than two months from the time period set in the Office action in the absence of sufficient cause or for more than a reasonable time.

The filing of a timely first response to this final rejection will be construed as including a request to extend the shortened statutory period for an additional two months. In no event, however, will the

statutory period for response expire later than SIX MONTHS from the mailing date of the final action.
See MPEP § 2265.

10. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 7,583,191 throughout the course of this reexamination proceeding. The Patent Owner is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

11. Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

All correspondence relating to this ex parte reexamination proceeding should be directed:

Electronically: Registered users may submit via Patent Center at <https://patentcenter.uspto.gov/>.

By Mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand: Customer Service Window
Knox Building
501 Dulany Street
Alexandria, VA 22314

For Patent Center transmissions, 37 CFR 1.8(a)(1)(i)(C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if (a) it is transmitted via the USPTO patent electronic filing system in accordance

with 37 CFR 1.6(a)(4), and (b) includes a certificate of transmission for each piece of correspondence stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

/Ovidio Escalante/
Ovidio Escalante
Reexamination Specialist
Central Reexamination Unit - Art Unit 3992
(571) 272-7537

Conferees:

/MATTHEW E HENEGHAN/
Primary Examiner, Art Unit 3992
/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992

Office Action in Ex Parte Reexamination	Control No. 90/019,542	Patent Under Reexamination 7583191	
	Examiner OVIDIO ESCALANTE	Art Unit 3992	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

- a. ☒ Responsive to the communication(s) filed on 16 May 2025.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

b. ☒ This action is made FINAL.

c. ☐ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c)**. If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. ☐ Notice of References Cited by Examiner, PTO-892. | 3. ☐ Interview Summary, PTO-474. |
| 2. ☐ Information Disclosure Statement, PTO/SB/08. | 4. ☐ _____. |

Part II SUMMARY OF ACTION

- 1a. ☒ Claims 1,8,19 and 21-131 are subject to reexamination.
- 1b. ☒ Claims 2-7,9-13,15-18 and 20 are not subject to reexamination.
2. ☒ Claims See Continuation Sheet have been canceled in the present reexamination proceeding.
3. ☒ Claims 55,57-58,61-63,66-72,90,92-93,96-98,100 and 102-108 are patentable and/or confirmed.
4. ☒ Claims 8,38,40-42,45-46,48-54,64,73,75-77,80-81,83-89,99,109,113-119,121-127 and 129-131 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have

- 1 ☐ been received.
- 2 ☐ not been received.
- 3 ☐ been filed in Application No. _____.
- 4 ☐ been filed in reexamination Control No. _____.
- 5 ☐ been received by the International Bureau in PCT application No. _____.

* See the attached detailed Office action for a list of the certified copies not received.

9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.
10. ☐ Other: _____

cc: Requester (if third party requester)

Continuation of Part II SUMMARY OF ACTION 2. Claims have been canceled in the present reexamination proceeding: 1,14,19,21-37,39,43-44,47,56,59-60,65,74,78-79,82,91,94-95,101,112,120 and 128

<i>Search Notes</i> 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

CPC - Searched*		
Symbol	Date	Examiner
None	04/10/2025	OE

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

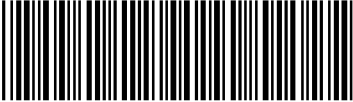
Search Notes		
Search Notes	Date	Examiner
Reviewed patent file, family application files, PTACTS, lit. search	09/12/2024	LMN
PE2E Search	04/10/2025	OE
P-TACTS for AIA Proceedings	04/10/2025	OE
PDP (Patent Data Portal) for continuity data	04/10/2025	OE
Reviewed Reexam File (90/019,542)	04/10/2025	OE
Reviewed underlying patent file (US 7583191)	04/10/2025	OE
Reviewed Reexam File (90/019,542)	06/10/2025	OE
PE2E Search	06/10/2025	OE

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<i>Search Notes</i> 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

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Reexamination 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Certificate Date	Certificate Number

Requester Correspondence Address: ☒ Patent Owner ☐ Third Party
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226

LITIGATION REVIEW ☒	OE (examiner initials)	10 April 2025 (date)
Case Name		Director Initials
8:22cv33, Vivint Inc. V. Sb Lp Holdings Llc (closed)		
8:22cv34, Vivint Inc. V. Sb Lp Holdings Llc (closed)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER

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PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L106	14	((WO-0193220-A1 OR CA-2532502-A1).did. AND FTDB.dbnm.) OR ((US-20060139449-A1 OR US-20030027565-A1 OR US-20090015711-A1 OR US-20050089052-A1 OR US-20040257336-A1 OR US-20050007451-A1 OR US-20050285734-A1).did. AND PGPB.dbnm.) OR ((US-7193644-B2 OR US-5428388-A OR US-6429893-B1 OR US-7304572-B2 OR US-7583191-B2).did. AND USPT.dbnm.)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/06/05 07:57 AM
L107	14	((WO-0193220-A1 OR CA-2532502-A1).did. AND FTDB.dbnm.) OR ((US-20060139449-A1 OR US-20030027565-A1 OR US-20090015711-A1 OR US-20050089052-A1 OR US-20040257336-A1 OR US-20050007451-A1 OR US-20050285734-A1).did. AND PGPB.dbnm.) OR ((US-7193644-B2 OR US-5428388-A OR US-6429893-B1 OR US-7304572-B2 OR US-7583191-B2).did. AND USPT.dbnm.) AND (proximity)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/06/05 07:57 AM
L108	4	("20110055334").pn.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG,	OR	ON	ON	2025/06/05 08:11 AM

L109	10	((WO-0193220-A1 OR CA-2532502-A1).did. AND FTDB.dbnm.) OR ((US-20060139449-A1 OR US-20030027565-A1 OR US-20090015711-A1 OR US-20050089052-A1 OR US-20040257336-A1 OR US-20050007451-A1 OR US-20050285734-A1).did. AND PGPB.dbnm.) OR ((US-7193644-B2 OR US-5428388-A OR US-6429893-B1 OR US-7304572-B2 OR US-7583191-B2).did. AND USPT.dbnm.) AND (password)	SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/06/05 08:51 AM
L110	7	(@rlad<="20061114" OR @ad<="20061114") AND motion SAME proximity AND (doorbell OR door ADJ bell) SAME (video OR image OR visual) AND (authentica\$ OR password)	(US-PGPUB; USPAT)	OR	ON	ON	2025/06/05 08:55 AM
L111	13	((WO-0193220-A1 OR CA-2532502-A1).did. AND FTDB.dbnm.) OR ((US-20060139449-A1 OR US-20030027565-A1 OR US-20090015711-A1 OR US-20050089052-A1 OR US-20040257336-A1 OR US-20050007451-A1 OR US-20050285734-A1).did. AND PGPB.dbnm.) OR ((US-7193644-B2 OR US-5428388-A OR US-6429893-B1 OR US-7304572-B2 OR US-7583191-B2).did. AND USPT.dbnm.) AND (proximity AND doorbell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/06/06 05:27 AM

L112	13	((WO-0193220-A1 OR CA-2532502-A1).did. AND FTDB.dbnm.) OR ((US-20060139449-A1 OR US-20030027565-A1 OR US-20090015711-A1 OR US-20050089052-A1 OR US-20040257336-A1 OR US-20050007451-A1 OR US-20050285734-A1).did. AND PGPB.dbnm.) OR ((US-7193644-B2 OR US-5428388-A OR US-6429893-B1 OR US-7304572-B2 OR US-7583191-B2).did. AND USPT.dbnm.) AND ("proximity" AND doorbell)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DK, EA, EE, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2025/06/06 05:27 AM
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PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.

UNITED STATES
PATENT AND TRADEMARK OFFICEP.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov**ELECTRONIC ACKNOWLEDGEMENT RECEIPT**APPLICATION #
90/019,542RECEIPT DATE / TIME
07/01/2025 10:21:21 AM Z ETATTORNEY DOCKET #
-**Title of Invention**

SECURITY SYSTEM AND METHOD FOR USE OF SAME

Application Information

APPLICATION TYPE Utility / ex parte reexam

PATENT # 7583191

CONFIRMATION # 4697

FILED BY Kirby Drake

PATENT CENTER # 71162367

FILING DATE 08/15/2024

CUSTOMER # 178493

FIRST NAMED
INVENTOR - 7583191CORRESPONDENCE
ADDRESS -

AUTHORIZED BY -

Documents**TOTAL DOCUMENTS: 1**

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Zinser_RFOA.pdf	10	Response After Final Action	177 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Zinser_RFOA.pdf	96542C268A8B48F14F9FEC2D3838BA175E8EBFD62DD3AD2F 0D285F61C3F1EDC76540487F12C8F30E8EDDE7080A348FB57 D4DD4EAF9725BBAF3B2B99444C1AD54

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d))

and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Owner/Assignee: Duke W. Zinser	§	
	§	Group Art Unit: 3992
Control No.: 90/019,542	§	
	§	Examiner: Ovidio Escalante
Filed: August 15, 2024	§	
	§	Confirmation: 4697
For: Security System and Method for	§	
Use of Same	§	

CERTIFICATE OF EFS-WEB FILING

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on July 1, 2025.

/Kirby Drake/
Kirby Drake

AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION

Patent Owner/Assignee acknowledges receipt of the Office Action in the Ex Parte Reexamination dated June 16, 2025 (the “Office Action” or “OA”). In response, Patent Owner/Assignee respectfully requests entry of the following amendments and consideration of the accompanying remarks.

Amendments to the Claims begin on page 2.

Remarks/Arguments begin on page 10.

AMENDMENTS TO THE CLAIMS

1. (Canceled)

8. (Canceled)

14. (Canceled)

19. (Canceled)

21-54. (Canceled)

55. (New, Previously Presented) A doorbell monitoring system comprising:

a doorway having an environment;

a doorbell located in an entry point, activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store the entry point visual and audio communications captured by the single communications unit in a data storage unit of the control unit;

wherein the control panel is configured to allow an individual to manage a security system;

wherein an alarm system interface of the control panel is configured to interface with the security system;

wherein the video camera is configured to collect the entry point visual communications captured by the single communications unit before the triggering event;

wherein the video camera is configured to collect additional visual communications after the triggering event;

wherein the doorbell monitoring system is configured to establish communication with the control unit upon activation of the doorbell;

wherein at least a portion of an initial communication after the doorbell is activated is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

56. (Canceled)

57. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein

the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

58. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

59-60. (Canceled).

61. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

62. (New, Previously Presented) The doorbell monitoring system of claim 61, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

63. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

64-65. (Canceled)

66. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

67. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take

two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

68. (New, Previously Presented) The doorbell monitoring system of claim 67, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

69. (New, Previously Presented) The doorbell monitoring system of claim 55, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

70. (New, Previously Presented) The doorbell monitoring system of claim 69, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

71. (New, Previously Presented) The system of claim 69, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

72. (New, Previously Presented) The system of claim 69, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

73-89. (Canceled)

90. (New, Previously Presented) A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point, activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is configured to play a pre-recorded message to a visitor at the entry point and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;

wherein the video camera is configured to collect the entry point visual communications before the triggering event; and

wherein the video camera is configured to collect additional visual communications after the triggering event.

91. (Canceled)

92. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

93. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

94-95. (Canceled)

96. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

97. (New, Previously Presented) The doorbell monitoring system of claim 96, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

98. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime; and wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

99. (Canceled)

100. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit further comprises a data storage unit wherein the control unit is configured to store the entry point visual and audio communications in the data storage unit of the control unit.

101. (Canceled)

102. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

103. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

104. (New, Previously Presented) The doorbell monitoring system of claim 103, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

105. (New, Previously Presented) The doorbell monitoring system of claim 90, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

106. (New, Previously Presented) The doorbell monitoring system of claim 105, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

107. (New, Previously Presented) The system of claim 105, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

108. (New, Previously Presented) The system of claim 105, wherein the control unit

communicates the captured visual and audio communications to the onsite storage device via
wired communication.

109-131. (Canceled)

REMARKS

Patent Owner/Assignee thanks the Examiners for indicating the patentability of claims 55, 57-58, 61-63, 66-72, 90, 92-93, 96-98, 100, and 102-108. To accelerate examination, and without agreeing as to the merit of any of the rejections in the present Office Action, which rejections Patent Owner/Assignee traverses, Patent Owner/Assignee has canceled the remaining claims that were indicated as rejected. Accordingly, Patent Owner/Assignee believes that a reexamination certificate is appropriate to be issued at this time as to claims 55, 57-58, 61-63, 66-72, 90, 92-93, 96-98, 100, and 102-108.

To the extent that any further action is needed to place the claims in condition for allowance, Patent Owner/Assignee hereby requests an interview regarding the Pending Claims in order to expedite allowance of same. Patent Owner/Assignee respectfully invites the Examiners to contact the undersigned at the telephone number indicated below or at kirby@kirbydrakelaw.com.

Respectfully submitted,

Date: July 1, 2025

2550 Pacific Ave, Suite 700
Dallas, Texas 75226
(972) 635-0531

E-mail: kirby@kirbydrakelaw.com

/Kirby B. Drake/

Kirby B. Drake
Reg. No. 55,126
ATTORNEY FOR PATENT OWNER/ASSIGNEE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 90/019,542		Filing Date 08/15/2024		☐ To be Mailed		
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO										
APPLICATION AS FILED - PART I										
		(Column 1)			(Column 2)					
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)		
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))		N/A		N/A		N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A				
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 = *				x \$40 =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 = *				x \$ 192 =				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL				
APPLICATION AS AMENDED - PART II										
		(Column 1)			(Column 2)	(Column 3)				
AMENDMENT	07/01/2025	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	* 27	Minus	** 130	= 0	x \$ 80 =		0		
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 9	= 0	x \$ 240 =		0		
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
							TOTAL ADD'L FEE		0	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	*	Minus	**	=	x \$ 0 =				
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x \$ 0 =				
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
							TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.							LIE			
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".							/PATRICIA F LEWIS/			
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".										
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/019,542	08/15/2024	7583191		4697
178493	7590	07/30/2025		
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226			EXAMINER ESCALANTE, OVIDIO	
			ART UNIT	PAPER NUMBER
			3992	
			MAIL DATE	DELIVERY MODE
			07/30/2025	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Intent to Issue Ex Parte Reexamination Certificate	Control No. 90/019,542	Patent Under Reexamination 7583191	
	Examiner OVIDIO ESCALANTE	Art Unit 3992	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☒ Prosecution on the merits is (or remains) closed in this *ex parte* reexamination proceeding. This proceeding is subject to reopening at the initiative of the Office or upon petition. *Cf.* 37 CFR 1.313(a). A Certificate will be issued in view of
 - (a) ☒ Patent owner's communication(s) filed: 7/01/2025.
 - (b) ☐ Patent owner's failure to file an appropriate timely response to the Office action mailed: _____.
 - (c) ☐ Patent owner's failure to timely file an Appeal Brief (37 CFR 41.31).
 - (d) ☐ The decision on appeal by the ☐ Board of Patent Appeals and Interferences ☐ Court dated _____
 - (e) ☐ Other: _____.
2. The Reexamination Certificate will indicate the following:
 - (a) Change in the Specification: ☐ Yes ☒ No
 - (b) Change in the Drawing(s): ☐ Yes ☒ No
 - (c) Status of the Claim(s):
 - (1) Patent claim(s) confirmed: _____.
 - (2) Patent claim(s) amended (including dependent on amended claim(s)): _____
 - (3) Patent claim(s) canceled: 1,8,14 and 19.
 - (4) Newly presented claim(s) patentable: 55,57-58,61-63,66-72,90,92-93,96-98,100 and 102-108.
 - (5) Newly presented canceled claims: 21-54,56,59-60,64-65,73-89,91,94-95,99,101 and 109-131.
 - (6) Patent claim(s) ☐ previously ☐ currently disclaimed: _____
 - (7) Patent claim(s) not subject to reexamination: 2-7,9-13,15-18 and 20.
3. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
4. ☒ Note the attached statement of reasons for patentability and/or confirmation. Any comments considered necessary by patent owner regarding reasons for patentability and/or confirmation must be submitted promptly to avoid processing delays. Such submission(s) should be labeled: "Comments On Statement of Reasons for Patentability and/or Confirmation."
5. ☐ Note attached NOTICE OF REFERENCES CITED (PTO-892).
6. ☐ Note attached LIST OF REFERENCES CITED (PTO/SB/08 or PTO/SB/08 substitute).
7. ☐ The drawing correction request filed on _____ is: ☐ approved ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
 - ☐ been received.
 - ☐ not been received.
 - ☐ been filed in Application No. _____.
 - ☐ been filed in reexamination Control No. _____.
 - ☐ been received by the International Bureau in PCT Application No. _____.

* Certified copies not received: _____.
9. ☐ Note attached Examiner's Amendment.
10. ☐ Note attached Interview Summary (PTO-474).
11. ☐ Other: _____.

All correspondence relating to this reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992	
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cc: Requester (if third party requester)

DETAILED ACTION

1. This office action is in response to the Patent Owner's response filed on July 1, 2025.
2. As set forth in the Patent Owner's response, the previously rejected claims (8, 38, 40-42, 45, 46, 48-54, 64, 73, 75-77, 80, 81, 83-89, 99, 109, 113-119, 121-127, and 129-131) as set forth in the Final Office Action, are now canceled.
3. New claims 55, 57, 58, 61-63, 66-72, 90, 92, 93, 96-98, 100, and 102-108 remain pending.

Status of the Claims

4. Original claims 1, 8, 14 and 19 are canceled.
Original claims 2-7, 9-13, 15-18 and 20 are not subject to reexamination.
New claims 21-54, 56, 59, 60, 64, 65, 73-89, 91, 94, 95, 99, 101, and 109-131 are canceled.
New claims 55, 57, 58, 61-63, 66-72, 90, 92, 93, 96-98, 100, and 102-108 are allowable.

Claim Interpretation

5. As per MPEP 2258(G), Original patent claims will be examined only on the basis of prior art patents or printed publications applied under the appropriate parts of 35 U.S.C. 102 and 103 in reexaminations ordered under 35 U.S.C. 304. See MPEP § 2217. During reexamination ordered under 35 U.S.C. 304, and also during reexamination ordered under 35 U.S.C. 257, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims (*In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984)). In a reexamination proceeding involving claims of an expired patent, claim construction pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim "are generally given their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention) should be applied since the expired claim are not subject to amendment. See *Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter. 1986). The statutory presumption of validity, 35 U.S.C. 282, has no application in reexamination (*In re Etter*, 756 F.2d 852, 225 USPQ 1 (Fed. Cir. 1985)).

Response to Arguments

As set forth in the Patent Owner's response, the claims that were indicated as being rejected in the final office action have now been canceled.

The Examiner notes that in view of the cancelation of the rejected claims, all rejections are withdrawn.

STATEMENT OF REASONS FOR PATENTABILITY AND/OR CONFIRMATION

6. The following is an examiner's statement of reasons for patentability and/or confirmation of the claims found patentable in this reexamination proceeding:

Regarding **claim 55** (including dependent claims 57, 58, 61, 62, 63, and 66-72) and **claim 90** (including dependent claims 90, 92, 93, 96-98, 100, and 102-108), the Examiner finds these claims allowable over the relied upon prior art combinations.

The Examiner notes that claim 55 is directed to a doorbell monitoring system which in response to activation of a doorbell, visual and audio communications at an entry point are captured and transmitted. The claim further recites a cellular telephone for rendering at least one portion of the entry point visual and audio communications received from a control unit.

With respect to Menard, Klein and Von Bauer, the Examiner finds that Menard discloses the transmission of a signal in response to the actuation of a doorbell. Menard does not specifically disclose of a control panel being configured to allow an individual to manage a security system or where a video camera is configured to collect the entry point visual communications captured by the single communication unit before the triggering event or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system in combination with the rest of the limitation of the claim.

In addition, neither Von Bauer nor Klein disclose a control panel being configured to allow an individual to manage a security system or where a video camera is configured to collect the entry point visual communications captured by the single communication unit before the triggering event or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system in combination with the rest of the limitations of the claim. The Examiner finds that although Menard, Klein and von Bauer discloses of actuation of a doorbell and transmission of signals responsive to the actuation of the doorbell, neither Menard nor von Bauer further disclose the capturing of the visual communication prior to the activation of the doorbell.

With respect to Sheynman, Hershkovitz and Xin, the Examiner finds that the teachings show a doorbell monitoring system in which a portion of audio and visual communications are transmitted to a cellular user. The Examiner finds that in view of the claims, Sheynman, Hershkovitz and Xin do not disclose of a video camera being configured to collect the entry point visual communication captured by a single communication unit before the triggering event where the triggering event is the activation of a doorbell which is configured to capture and transmit visual and audio communications at the entry point or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system. The Examiner notes that Xin discloses of capturing visual communications, without the activation of a doorbell, however, Xin does not disclose of both doorbell activation for the capturing and transmission of visual and audio communication in combination with also capturing the visual images prior to the activation of a doorbell.

As per claim 90, the claim, like claim 55, is directed to a doorbell monitoring system. In addition, similar to claim 55, the claim recites both the capturing and transmission of visual and

audio communications at the entry point in response to an activation of a doorbell in combination with a video camera being configured to collect the entry point visual communications before the triggering event. Therefore, for at least this same reason as set forth above in claim 55, the relied upon prior art of record do not teach the limitations set forth in claim 90.

Any comments considered necessary by PATENT OWNER regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the patent owner should be labeled: "Comments on Statement of Reasons for Patentability and/or Confirmation" and will be placed in the reexamination file.

Conclusion

10. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 7,583,191 throughout the course of this reexamination proceeding. The Patent Owner is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

11. Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

All correspondence relating to this ex parte reexamination proceeding should be directed:

Electronically: Registered users may submit via Patent Center at <https://patentcenter.uspto.gov/>.

By Mail to: Mail Stop *Ex Parte* Reexam
 Central Reexamination Unit
 Commissioner for Patents
 United States Patent & Trademark Office
 P.O. Box 1450
 Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand: Customer Service Window
Knox Building
501 Dulany Street
Alexandria, VA 22314

For Patent Center transmissions, 37 CFR 1.8(a)(1)(i)(C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if (a) it is transmitted via the USPTO patent electronic filing system in accordance with 37 CFR 1.6(a)(4), and (b) includes a certificate of transmission for each piece of correspondence stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

/Ovidio Escalante/
Ovidio Escalante
Reexamination Specialist
Central Reexamination Unit - Art Unit 3992
(571) 272-7537

Conferees:

/MATTHEW E HENEGHAN/
Primary Examiner, Art Unit 3992
/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992

Reexamination 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Certificate Date	Certificate Number C1

Requester Correspondence Address: ☒ Patent Owner ☐ Third Party
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226

LITIGATION REVIEW ☒	OE (examiner initials)	10 April 2025 (date)
Case Name		Director Initials
8:22cv33, Vivint Inc. V. Sb Lp Holdings Llc (closed)		
8:22cv34, Vivint Inc. V. Sb Lp Holdings Llc (closed)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER
None	

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<i>Search Notes</i> 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

CPC - Searched*		
Symbol	Date	Examiner
None	04/10/2025	OE

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed patent file, family application files, PTACTS, lit. search	09/12/2024	LMN
PE2E Search	04/10/2025	OE
P-TACTS for AIA Proceedings	04/10/2025	OE
PDP (Patent Data Portal) for continuity data	04/10/2025	OE
Reviewed Reexam File (90/019,542)	04/10/2025	OE
Reviewed underlying patent file (US 7583191)	04/10/2025	OE
Reviewed Reexam File (90/019,542)	06/10/2025	OE
PE2E Search	06/10/2025	OE

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<div><div>Search Notes</div><div></div></div>	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/019,542	7583191
	Examiner	Art Unit
	OVIDIO ESCALANTE	3992

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

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Issue Classification 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

CPC						
Symbol					Type	Version
G08B	/	25	/	08	F	2013-01-01
G08B	/	13	/	196	I	2013-01-01
H04N	/	7	/	186	I	2013-01-01
H04N	/	7	/	20	I	2013-01-01

CPC Combination Sets							
Symbol				Type	Set	Ranking	Version
	/		/				

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	27	
/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992	15 July 2025	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	21	1

Issue Classification 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

INTERNATIONAL CLASSIFICATION			
CLAIMED			
G08B	/	13	/ 00
NON-CLAIMED			
	/		/

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	27	
/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992	15 July 2025	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	21	1

Issue Classification 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

☒ Claims renumbered in the same order as presented by applicant
 ☐ CPA
 ☐ T.D.
 ☐ R.1.47

CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		15		29		43	22	57	32	71		85		99
	2		16		30		44	23	58	33	72		86	40	100
	3		17		31		45		59		73		87		101
	4		18		32		46		60		74		88	41	102
	5		19		33		47	24	61		75		89	42	103
	6		20		34		48	25	62		76	34	90	43	104
	7		21		35		49	26	63		77		91	44	105
	8		22		36		50		64		78	35	92	45	106
	9		23		37		51		65		79	36	93	46	107
	10		24		38		52	27	66		80		94	47	108
	11		25		39		53	28	67		81		95		
	12		26		40		54	29	68		82	37	96		
	13		27		41	21	55	30	69		83	38	97		
	14		28		42		56	31	70		84	39	98		

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 27	
/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992 (Primary Examiner) _____ (Date) 15 July 2025		O.G. Print Claim(s) 21	O.G. Print Figure 1



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CONFIRMATION NO. 4697

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
90/019,542	08/15/2024	340	3992			
APPLICANTS Zinser Duke, Residence Not Provided;						
INVENTORS 7583191, Residence Not Provided; Patent Owner, Residence Not Provided; Duke W. Zinser, Garland, TX;						
** CONTINUING DATA ***** This application is a REX of 11/559,808 11/14/2006 PAT 7583191						
** FOREIGN APPLICATIONS *****						
** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and Acknowledged <u>/Ovidio Escalante/</u> Examiner's Signature		☐ Met after Allowance Initials _____	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 3
ADDRESS Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226 UNITED STATES						
TITLE SECURITY SYSTEM AND METHOD FOR USE OF SAME						
FILING FEE RECEIVED 0.00	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Owner/Assignee: Duke W. Zinser	§	
	§	Group Art Unit: 3992
Control No.: 90/019,542	§	
	§	Examiner: Ovidio Escalante
Filed: August 15, 2024	§	
	§	Confirmation: 4697
For: Security System and Method for	§	
Use of Same	§	

CERTIFICATE OF EFS-WEB FILING

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Pursuant to 37 CFR. § 1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on July 1, 2025.

/Kirby Drake/
Kirby Drake

AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION

Patent Owner/Assignee acknowledges receipt of the Office Action in the Ex Parte Reexamination dated June 16, 2025 (the “Office Action” or “OA”). In response, Patent Owner/Assignee respectfully requests entry of the following amendments and consideration of the accompanying remarks.

Amendments to the Claims begin on page 2.

Remarks/Arguments begin on page 10.



UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/019,542	08/15/2024	7583191		4697
178493	7590	08/27/2025		
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226			EXAMINER ESCALANTE, OVIDIO	
			ART UNIT	PAPER NUMBER
			3992	
			MAIL DATE	DELIVERY MODE
			08/27/2025	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Intent to Issue Ex Parte Reexamination Certificate	Control No. 90/019,542	Patent Under Reexamination 7583191	
	Examiner OVIDIO ESCALANTE	Art Unit 3992	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☒ Prosecution on the merits is (or remains) closed in this *ex parte* reexamination proceeding. This proceeding is subject to reopening at the initiative of the Office or upon petition. *Cf.* 37 CFR 1.313(a). A Certificate will be issued in view of
 - (a) ☒ Patent owner's communication(s) filed: 7/01/2025.
 - (b) ☐ Patent owner's failure to file an appropriate timely response to the Office action mailed: _____.
 - (c) ☐ Patent owner's failure to timely file an Appeal Brief (37 CFR 41.31).
 - (d) ☐ The decision on appeal by the ☐ Board of Patent Appeals and Interferences ☐ Court dated _____
 - (e) ☐ Other: _____.
2. The Reexamination Certificate will indicate the following:
 - (a) Change in the Specification: ☐ Yes ☒ No
 - (b) Change in the Drawing(s): ☐ Yes ☒ No
 - (c) Status of the Claim(s):
 - (1) Patent claim(s) confirmed: _____.
 - (2) Patent claim(s) amended (including dependent on amended claim(s)): _____
 - (3) Patent claim(s) canceled: 1,8,14 and 19.
 - (4) Newly presented claim(s) patentable: 55,57-58,61-63,66-72,90,92-93,96-98,100 and 102-108.
 - (5) Newly presented canceled claims: 21-54,56,59-60,64-65,73-89,91,94-95,99,101 and 109-131.
 - (6) Patent claim(s) ☐ previously ☐ currently disclaimed: _____
 - (7) Patent claim(s) not subject to reexamination: 2-7,9-13,15-18 and 20.
3. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
4. ☒ Note the attached statement of reasons for patentability and/or confirmation. Any comments considered necessary by patent owner regarding reasons for patentability and/or confirmation must be submitted promptly to avoid processing delays. Such submission(s) should be labeled: "Comments On Statement of Reasons for Patentability and/or Confirmation."
5. ☐ Note attached NOTICE OF REFERENCES CITED (PTO-892).
6. ☐ Note attached LIST OF REFERENCES CITED (PTO/SB/08 or PTO/SB/08 substitute).
7. ☐ The drawing correction request filed on _____ is: ☐ approved ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
 - ☐ been received.
 - ☐ not been received.
 - ☐ been filed in Application No. _____.
 - ☐ been filed in reexamination Control No. _____.
 - ☐ been received by the International Bureau in PCT Application No. _____.

* Certified copies not received: _____.
9. ☒ Note attached Examiner's Amendment.
10. ☐ Note attached Interview Summary (PTO-474).
11. ☐ Other: _____.

All correspondence relating to this reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992	
---	--

cc: Requester (if third party requester)

DETAILED ACTION

1. This office action is in response to the Patent Owner's response filed on July 1, 2025.
2. As set forth in the Patent Owner's response, the previously rejected claims (8, 38, 40-42, 45, 46, 48-54, 64, 73, 75-77, 80, 81, 83-89, 99, 109, 113-119, 121-127, and 129-131) as set forth in the Final Office Action, are now canceled.
3. New claims 55, 57, 58, 61-63, 66-72, 90, 92, 93, 96-98, 100, and 102-108 remain pending.
4. This is a corrected notice of intent to issue reexamination certificate. It corrects an issue with respect to claim 55.

Status of the Claims

5. Original claims 1, 8, 14 and 19 are canceled.
Original claims 2-7, 9-13, 15-18 and 20 are not subject to reexamination.
New claims 21-54, 56, 59, 60, 64, 65, 73-89, 91, 94, 95, 99, 101, and 109-131 are canceled.
New claims 55, 57, 58, 61-63, 66-72, 90, 92, 93, 96-98, 100, and 102-108 are allowable.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. The changes made by this examiner's amendment will be reflected in the reexamination certificate to issue in due course.

Amend Claim 55 as follow:

55. A doorbell monitoring system comprising:
a doorway having an environment;
a doorbell located in an entry point, activation of the doorbell being a triggering event;
a video camera and an external microphone disposed in the entry point, the video camera and the
external microphone, responsive to the triggering event, for capturing visual and audio communications at
the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store the entry point visual and audio communications captured by the single communications unit in a data storage unit of the control unit wherein a control panel is configured to allow an individual to manage a security system;

wherein an alarm system interface of the control panel is configured to interface with the security system;

wherein the video camera is configured to collect the entry point visual communications captured by the single communications unit before the triggering event;

wherein the video camera is configured to collect additional visual communications after the triggering event;

wherein the doorbell monitoring system is configured to establish communication with the control unit upon activation of the doorbell;

wherein at least a portion of an initial communication after the doorbell is activated is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

Claim Interpretation

6. As per MPEP 2258(G), Original patent claims will be examined only on the basis of prior art patents or printed publications applied under the appropriate parts of 35 U.S.C. 102 and 103 in reexaminations ordered under 35 U.S.C. 304. See MPEP § 2217. During reexamination ordered under 35 U.S.C. 304, and also during reexamination ordered under 35 U.S.C. 257, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims (*In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984)). In a reexamination proceeding involving claims of an expired patent, claim construction pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim "are generally given their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention) should be applied since the expired claim are not subject to amendment. See *Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter. 1986). The statutory presumption of validity, 35 U.S.C. 282, has no application in reexamination (*In re Etter*, 756 F.2d 852, 225 USPQ 1 (Fed. Cir. 1985)).

Response to Arguments

As set forth in the Patent Owner's response, the claims that were indicated as being rejected in the final office action have now been canceled.

The Examiner notes that in view of the cancelation of the rejected claims, all rejections are withdrawn.

STATEMENT OF REASONS FOR PATENTABILITY AND/OR CONFIRMATION

7. The following is an examiner's statement of reasons for patentability and/or confirmation of the claims found patentable in this reexamination proceeding:

Regarding **claim 55** (including dependent claims 57, 58, 61, 62, 63, and 66-72) and **claim 90** (including dependent claims 90, 92, 93, 96-98, 100, and 102-108), the Examiner finds these claims allowable over the relied upon prior art combinations.

The Examiner notes that claim 55 is directed to a doorbell monitoring system which in response to activation of a doorbell, visual and audio communications at an entry point are captured and transmitted. The claim further recites a cellular telephone for rendering at least one portion of the entry point visual and audio communications received from a control unit.

With respect to Menard, Klein and Von Bauer, the Examiner finds that Menard discloses the transmission of a signal in response to the actuation of a doorbell. Menard does not specifically disclose of a control panel being configured to allow an individual to manage a security system or where a video camera is configured to collect the entry point visual communications captured by the single communication unit before the triggering event or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system in combination with the rest of the limitation of the claim.

In addition, neither Von Bauer nor Klein disclose a control panel being configured to allow an individual to manage a security system or where a video camera is configured to collect the entry point visual communications captured by the single communication unit before the triggering event or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system in combination with the rest of the limitations of the claim. The Examiner finds that although Menard, Klein and von Bauer discloses of actuation of a doorbell and transmission of signals responsive to the actuation of the doorbell, neither Menard nor von

Bauer further disclose the capturing of the visual communication prior to the activation of the doorbell.

With respect to Sheynman, Hershkovitz and Xin, the Examiner finds that the teachings show a doorbell monitoring system in which a portion of audio and visual communications are transmitted to a cellular user. The Examiner finds that in view of the claims, Sheynman, Hershkovitz and Xin do not disclose of a video camera being configured to collect the entry point visual communication captured by a single communication unit before the triggering event where the triggering event is the activation of a doorbell which is configured to capture and transmit visual and audio communications at the entry point or where the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system. The Examiner notes that Xin discloses of capturing visual communications, without the activation of a doorbell, however, Xin does not disclose of both doorbell activation for the capturing and transmission of visual and audio communication in combination with also capturing the visual images prior to the activation of a doorbell.

As per claim 90, the claim, like claim 55, is directed to a doorbell monitoring system. In addition, similar to claim 55, the claim recites both the capturing and transmission of visual and audio communications at the entry point in response to an activation of a doorbell in combination with a video camera being configured to collect the entry point visual communications before the triggering event. Therefore, for at least this same reason as set forth above in claim 55, the relied upon prior art of record do not teach the limitations set forth in claim 90.

Any comments considered necessary by PATENT OWNER regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the patent owner should be labeled: "Comments on Statement of Reasons for Patentability and/or Confirmation" and will be placed in the reexamination file.

Conclusion

10. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 7,583,191 throughout the course of this reexamination proceeding. The Patent Owner is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

11. Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

All correspondence relating to this ex parte reexamination proceeding should be directed:

Electronically: Registered users may submit via Patent Center at <https://patentcenter.uspto.gov/>.

By Mail to: Mail Stop *Ex Parte* Reexam
 Central Reexamination Unit
 Commissioner for Patents
 United States Patent & Trademark Office
 P.O. Box 1450
 Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
 Central Reexamination Unit

By hand: Customer Service Window
 Knox Building
 501 Dulany Street
 Alexandria, VA 22314

For Patent Center transmissions, 37 CFR 1.8(a)(1)(i)(C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if (a) it is transmitted via the USPTO patent electronic filing system in accordance with 37 CFR 1.6(a)(4), and (b) includes a certificate of transmission for each piece of correspondence

stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

/Ovidio Escalante/
Ovidio Escalante
Reexamination Specialist
Central Reexamination Unit - Art Unit 3992
(571) 272-7537

Conferees:

/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992

<i>Issue Classification</i> 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

CPC						
Symbol					Type	Version
G08B	/	25	/	08	F	2013-01-01
G08B	/	13	/	196	I	2013-01-01
H04N	/	7	/	186	I	2013-01-01
H04N	/	7	/	20	I	2013-01-01

CPC Combination Sets					
Symbol				Type	Version
	/		/		

NONE (Assistant Examiner) (Date)		Total Claims Allowed: 27	
/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992 (Primary Examiner) (Date)		O.G. Print Claim(s) 21	O.G. Print Figure 1

Issue Classification 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

INTERNATIONAL CLASSIFICATION			
CLAIMED			
G08B	/	13	/ 00
NON-CLAIMED			
	/		/

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE	Total Claims Allowed:	
(Assistant Examiner)	(Date)	27
/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992	26 August 2025	O.G. Print Claim(s)
(Primary Examiner)	(Date)	21
		O.G. Print Figure
		1

Issue Classification 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Examiner OVIDIO ESCALANTE	Art Unit 3992

☒ Claims renumbered in the same order as presented by applicant
 ☐ CPA
 ☐ T.D.
 ☐ R.1.47

CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		15		29		43	22	57	32	71		85		99
	2		16		30		44	23	58	33	72		86	40	100
	3		17		31		45		59		73		87		101
	4		18		32		46		60		74		88	41	102
	5		19		33		47	24	61		75		89	42	103
	6		20		34		48	25	62		76	34	90	43	104
	7		21		35		49	26	63		77		91	44	105
	8		22		36		50		64		78	35	92	45	106
	9		23		37		51		65		79	36	93	46	107
	10		24		38		52	27	66		80		94	47	108
	11		25		39		53	28	67		81		95		
	12		26		40		54	29	68		82	37	96		
	13		27		41	21	55	30	69		83	38	97		
	14		28		42		56	31	70		84	39	98		

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 27	
/OVIDIO ESCALANTE/ Primary Examiner, Art Unit 3992 (Primary Examiner) _____ (Date) _____		26 August 2025 (Date)	O.G. Print Claim(s) 21 O.G. Print Figure 1

<div><div>Search Notes</div><div></div></div>	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/019,542	7583191
	Examiner	Art Unit
	OVIDIO ESCALANTE	3992

CPC - Searched*		
Symbol	Date	Examiner
None	04/10/2025	OE

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed patent file, family application files, PTACTS, lit. search	09/12/2024	LMN
PE2E Search	04/10/2025	OE
P-TACTS for AIA Proceedings	04/10/2025	OE
PDP (Patent Data Portal) for continuity data	04/10/2025	OE
Reviewed Reexam File (90/019,542)	04/10/2025	OE
Reviewed underlying patent file (US 7583191)	04/10/2025	OE
Reviewed Reexam File (90/019,542)	06/10/2025	OE
PE2E Search	06/10/2025	OE

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<div> <div>Search Notes</div>  </div>	<div>Application/Control No.</div> <div>90/019,542</div>	<div>Applicant(s)/Patent Under Reexamination</div> <div>7583191</div>
	<div>Examiner</div> <div>OVIDIO ESCALANTE</div>	<div>Art Unit</div> <div>3992</div>

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
None	None	6/10/2025	OE

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Reexamination 	Application/Control No. 90/019,542	Applicant(s)/Patent Under Reexamination 7583191
	Certificate Date	Certificate Number C1

Requester Correspondence Address: ☒ Patent Owner ☐ Third Party
Kirby Drake Law PLLC 2550 Pacific Avenue Suite 700 Dallas, TX 75226

LITIGATION REVIEW ☒	OE (examiner initials)	10 April 2025 (date)
Case Name		Director Initials
8:22cv33, Vivint Inc. V. Sb Lp Holdings Llc (closed)		
8:22cv34, Vivint Inc. V. Sb Lp Holdings Llc (closed)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER
None	

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US007583191C1

(12) **EX PARTE REEXAMINATION CERTIFICATE** (13031st)
United States Patent
Zinser

(10) **Number:** **US 7,583,191 C1**(45) **Certificate Issued:** **Sep. 18, 2025**(54) **SECURITY SYSTEM AND METHOD FOR USE OF SAME**(75) **Inventor:** **Duke W. Zinser**, Garland, TX (US)(73) **Assignee:** **Duke Zinser**, Richardson, TX (US)**Reexamination Request:**

No. 90/019,542, Aug. 15, 2024

Reexamination Certificate for:Patent No.: **7,583,191**Issued: **Sep. 1, 2009**Appl. No.: **11/559,808**Filed: **Nov. 14, 2006**(51) **Int. Cl.****G08B 13/00** (2006.01)**G08B 13/196** (2006.01)**G08B 25/08** (2006.01)**H04N 7/18** (2006.01)**H04N 7/20** (2006.01)(52) **U.S. Cl.**CPC **G08B 25/08** (2013.01); **G08B 13/196**
(2013.01); **H04N 7/186** (2013.01); **H04N 7/20**
(2013.01)(58) **Field of Classification Search**

None

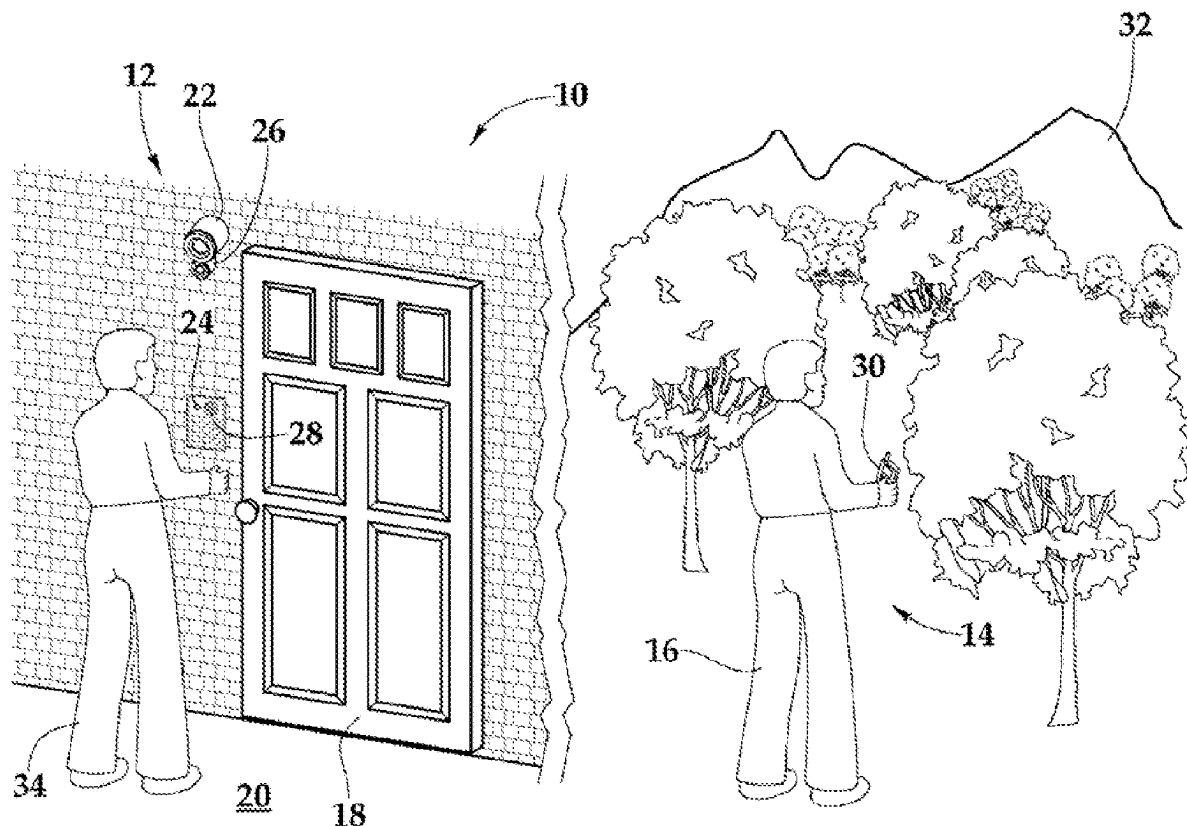
See application file for complete search history.

(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/019,542, please refer to the USPTO's Patent Electronic System.

Primary Examiner — Ovidio Escalante(57) **ABSTRACT**

A security system and method for use of the same are disclosed that provide for remote surveillance. In one embodiment, a property's entry point such as a doorway is equipped with a video camera, an external microphone, and an external speaker. An individual, such as an owner of the property, is away from the property and equipped with a cellular telephone. When a person arrives at the entry point, a control unit relays audio and visual data captured by the video camera and the external microphone to the individual's cellular telephone. Similarly, the control unit relays audio data from the owner to the person at the entry point.



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EX PARTE REEXAMINATION CERTIFICATE

THE PATENT IS HEREBY AMENDED AS
INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims 1, 8, 14 and 19 are cancelled.

New claims 21-47 are added and determined to be patentable.

Claims 2-7, 9-13, 15-18 and 20 were not reexamined.

21. *A doorbell monitoring system comprising:*

a doorway having an environment;

a doorbell located in an entry point, activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and the external microphone, and for communicating the received audio communications to the external speaker; and

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit;

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the entry point visual and audio communications are wirelessly streamed to the control unit;

wherein the control unit is configured to store the entry point visual and audio communications captured by the single communications unit in a data storage unit of the control unit wherein a control panel is configured to allow an individual to manage a security system;

wherein an alarm system interface of the control panel is configured to interface with the security system;

wherein the video camera is configured to collect the entry point visual communications captured by the single communications unit before the triggering event;

wherein the video camera is configured to collect additional visual communications after the triggering event;

wherein the doorbell monitoring system is configured to establish communication with the control unit upon activation of the doorbell;

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wherein at least a portion of an initial communication after the doorbell is activated is a notification sent to the cellular telephone; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

22. *The doorbell monitoring system of claim 21, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.*

23. *The doorbell monitoring system of claim 21, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.*

24. *The doorbell monitoring system of claim 21, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.*

25. *The doorbell monitoring system of claim 24, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.*

26. *The doorbell monitoring system of claim 21, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime; and*

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

27. *The doorbell monitoring system of claim 21, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.*

28. *The doorbell monitoring system of claim 21, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.*

29. *The doorbell monitoring system of claim 28, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.*

30. *The doorbell monitoring system of claim 21, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.*

31. *The doorbell monitoring system of claim 30, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.*

32. *The system of claim 30, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.*

33. *The system of claim 30, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.*

34. *A doorbell monitoring system comprising:*

a doorway having an environment;

a doorbell located in an entry point, activation of the doorbell being a triggering event;

a video camera and an external microphone disposed in the entry point, the video camera and the external microphone, responsive to the triggering event, for

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capturing visual and audio communications at the entry point and transmitting the captured visual and audio communications;

an external speaker disposed in the entry point, the external speaker for rendering received audio communications;

a control unit in communication with the video camera, the doorbell, and the external microphone, the control unit for communicating at least one portion of the visual and audio communications received from the video camera and external microphone, and for communicating the received audio communications to the external speaker;

a cellular telephone disposed remotely to the doorway and the control unit, the cellular telephone for capturing cellular audio communications at the cellular telephone, transmitting the cellular audio communications to the control unit, and rendering the at least one portion of entry point visual and audio communications received from the control unit; and

wherein the doorbell, the video camera, the external microphone, the external speaker, and a proximity detector are part of a single communications unit;

wherein the single communications unit is configured to play a pre-recorded message to a visitor at the entry point and wirelessly streaming at least a portion of the captured visual and audio communications to the control unit;

wherein the video camera is configured to collect the entry point visual communications before the triggering event; and

wherein the video camera is configured to collect additional visual communications after the triggering event.

35. The doorbell monitoring system of claim 34, wherein the single communications unit is configured to stream at least a portion of the captured visual and audio communications.

36. The doorbell monitoring system of claim 34, wherein the single communications unit is configured to capture additional video from the video camera after the triggering event.

37. The doorbell monitoring system of claim 34, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor.

38. The doorbell monitoring system of claim 37, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime.

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39. The doorbell monitoring system of claim 34, wherein the control unit is configured to display the entry point visual and audio communications on the video monitor in substantially realtime; and

wherein the doorbell monitoring system is configured to authenticate a user of the doorbell monitoring system.

40. The doorbell monitoring system of claim 34, wherein the control unit further comprises a data storage unit wherein the control unit is configured to store the entry point visual and audio communications in the data storage unit of the control unit.

41. The doorbell monitoring system of claim 34, wherein the control unit is configured to generate a file that includes at least a portion of the entry point visual and audio communications captured by the single communications unit.

42. The doorbell monitoring system of claim 34, wherein the cellular telephone comprises a user interface that allows user of the cellular telephone to take two or more actions after receiving at least a portion of the entry point visual and audio communications captured by the single communications unit.

43. The doorbell monitoring system of claim 42, wherein the two or more actions are at least one of (1) play a pre-recorded greeting, (2) request additional video and/or audio communications, (3) institute two-way video communications between the user and the person at the entry point, (4) notify an alarm company, or (5) selection of no action.

44. The doorbell monitoring system of claim 34, wherein the control unit further communicates captured visual and audio communications to an onsite storage device and wherein the storage device stores the captured visual and audio communications.

45. The doorbell monitoring system of claim 44, wherein the stored video and audio communications are accessible by an additional device apart from the control unit.

46. The system of claim 44, wherein the onsite storage device is configured to provide the additional device with access to the stored video and audio communications in substantially realtime.

47. The system of claim 45, wherein the control unit communicates the captured visual and audio communications to the onsite storage device via wired communication.

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