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(54) **Title:** EMERGENCY AUTOMATED GUNSHOT LOCKDOWN SYSTEM

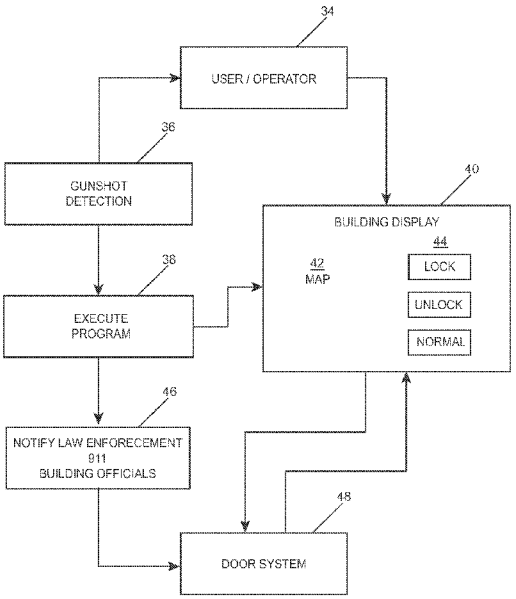

FIG. 2

(57) **Abstract:** The Emergency Automatic Gunshot Lockdown System (EAGL) (10) detects gunfire (22) and executes at least one predetermined lockdown scenario (Figs. 4, 5 and 6), such as notifying law enforcement of an active shooter (46), locking down soft target areas (48), and alerting building occupants of an active shooter situation (134, 140). Once a firearm is discharged, the gunshot detection sensors (22) send "real time" data to building officials, law enforcement, and building occupants (32) notifying them of an active shooter situation. Simultaneously, predetermined commands (38) are sent to perimeter, office, classroom, and other soft target areas to lockdown and stay secure, to keep the shooter from entering these soft target areas, and to prevent shooter from entering other buildings.

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[Continued on next page]

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EMERGENCY AUTOMATED GUNSHOT LOCKDOWN SYSTEM

BACKGROUND OF THE INVENTION

Field of the Invention (Technical Field):

The claimed invention relates to door lockdown systems, and more particularly, to a system and method that combines door locking technology, gunshot detection technology, and the control software for operating the system.

Background Art:

Historically, in the event of an active shooter, the majority of violence occurs in the first five minutes of the event. Usually, it takes ten minutes or more for law enforcement to arrive on the scene. Law enforcement arrives on the scene with scant information and are sometimes ambushed and killed by the deranged shooter.

Other systems that detect gunshots are connected to a monitoring station, which depends on a monitored building authority, and the human operator notifying an administrator of the gunshot situation, which will require a manual activation of the emergency system. Other gunshot detecting systems are triggering video feed from the location where the event is taking place; however, the lockdown sequence is manually activated.

Some approaches require the room occupant, usually the teacher, to lock the classroom door or exterior door manually. There is electronic access control, but that would still require a person to actuate the system should an active shooter start firing inside or outside a school. The problem with the manual approaches is that it relies on people to perform the task, and it takes a few minutes for the message to propagate to the affected area and take action. Another disadvantage is the high cost of such a system.

These state of the art approaches are not automated and require human response to actuate the system or lock a door, and there is too much time lost.

These notification systems are sluggish and sometimes inaccurate. Thus, today this function is being performed manually, and it relies on the people to be at the right place at the right time.

SUMMARY OF THE INVENTION (DISCLOSURE OF THE INVENTION)

The Emergency Automated Gunshot Lockdown (hereinafter "EAGL") system is designed to force the automatic lockdown of the doors in the event of an active shooter, and send notifications to law enforcement with real time data including shooter imagery, GPS locations, and weapon ballistic data with great accuracy and detail.

The EAGL system is a fully automated system. It locks the doors in seconds therefore containing the perpetrator in a certain area, and buys the people in the area time to escape or execute other lifesaving actions. The EAGL also automatically calls authorities and other building security notifying them of an active shooter situation including shooter imagery, GPS location of the shooter, along with weapons ballistics data. EAGL also displays in real time, the location of the shooter and activates the public address system with the emergency messages, and streams the closest camera video to the security control room monitor. All this is done in a matter of seconds with no human intervention, therefore, not subject to human error.

The primary advantage of this system is that it detects gunfire, notifies law enforcement of the presence of a shooter, and gathers critical data such as GPS location and imagery of the shooter as well as ballistic data of the event. It locks down classrooms and perimeter doors to deter a shooter from entering, and it sends alerts and emergency messaging through the PA system to notify building occupants of an active shooter.

Further advantages are that building occupants are protected by an automatic lockdown to keep the shooter out, and then law enforcement is given real time data so they are able to provide adequate and immediate response to an active shooter

without becoming a victim. Then, building occupants are given critical lifesaving information within seconds of an active shooter situation giving them situational awareness to make life saving decisions and movement away from the violence.

Other or related systems, methods, features, and advantages of the invention will be or will become apparent to one with skill in the art upon examination of the following figures and detailed description. It is intended that all such additional systems, methods, features, and advantages be included within this description, be within the scope of the invention, and be protected by the accompanying claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated into and form a part of the specification, illustrate several embodiments of the presently claimed invention and, together with the description, serve to explain the principles of the presently claimed invention. The drawings are only for the purpose of illustrating a preferred embodiment of the presently claimed invention and are not to be construed as limiting the presently claimed invention. In the drawings:

Fig. 1 shows a typical EAGL system.

Fig. 2 is a flow chart showing a method of the system operation.

Fig. 3A is a flow chart showing a scenario building program.

Fig. 3B is a continuation of the flow chart of Fig. 3A.

Fig. 3C is a continuation of the flowchart of Fig. 3B.

Fig. 4 shows an example of a multiple building scenario.

Fig. 5 shows a display of a building in a normal mode.

Fig. 6 shows a display of a building in an active shooter event.

DESCRIPTION OF THE PREFERRED EMBODIMENTS (BEST MODES FOR CARRYING OUT THE INVENTION)

As utilized herein, terms such as “about”, “approximately”, “substantially”, and “near” are intended to allow some leeway in mathematical exactness to account for tolerances that are acceptable in the trade. Accordingly, any deviations upward or

downward from the value modified by the terms “about”, “approximately”, “substantially”, or “near” in the range of 1% to 20% or less should be considered to be explicitly within the scope of the stated value.

As used herein, the term “software” includes source code, assembly language code, binary code, firmware, macro-instructions, micro-instructions, or the like, or any combination of two or more of the foregoing.

The term “memory” refers to any processor-readable medium, including but not limited to, RAM, ROM, EPROM, PROM, EEPROM, disk, floppy disk, hard disk, CD-ROM, DVD, or the like, or any combination of two or more of the foregoing, on which may be stored a series of software instructions executable by a processor.

The terms “processor” or central processing unit “CPU” refer to any device capable of executing a series of instructions and includes, without limitation, a general or special-purpose microprocessor, finite state machine, controller, computer, digital signal processor (DSP), or the like.

The term “logic” refers to implementations of functionality in hardware, software, or any combination of hardware and software.

The EAGL software integrates with a gunshot detector and an access control system that have a real time lockdown capability. The EAGL will automatically execute one or more preprogrammed scenarios that were entered into the system based on the specific customer security strategy.

The EAGL system also integrates with existing security systems such as an IP camera system, PA system, and phone dialer, as well as security command and control centers. It will manage multiple buildings based on the preprogramed scenarios.

Fig. 1 is a high level depiction of a typical EAGL system **10**. The components include a network backbone **12** connected to each of the other components providing for two-way communication. The connection can be wired, wireless or a combination of the two. EAGL system control **14** typically includes router **16**, EAGL control board **18** and gunshot detection control **20**. Router **16** provides for communication from the EAGL system control **14** to network backbone **12**. EAGL control board **18** provides for router **16** and gunshot detection control **20** which communicates with sensors **22** strategically placed in the building to be protected, whereby sensors **22** detect gunshots, such as detecting muzzle blasts and/or shockwaves from a projectile. Sensors **22** can also provide time and direction of the gunshot. Central Processing Unit (CPU) **24**, such as an Eplex server, provides for the receipt of data from sensors **22,** and automatically triggers responsive measures. A plurality of scenarios can be entered into CPU **24** that correspond to user defined parameters. These can include, but are not limited to, a building layout, number of doors, location of the detected gunshot, whether the area is populated, and the like. Once one or more gunshots are detected the preferred scenario(s) is automatically implemented. This can include locking doors **26** to contain one or more intruders, initializing audio/visual systems **28**, initializing prerecorded announcements over a PA system **30**, notifying law enforcement, and communicating and providing status information to command center **32** as discussed in detail below.

Fig. 2 is a flow chart exhibiting the preferred method for the EAGL system. In addition to gunshot detection **36** for triggering a lockdown scenario via execute program **38**, user/operator **34** can manually trigger a programmed scenario via execute program **38**. User/operator command is sent to control center where building display **40** provides for maps **42**, lock status **44**, and other pertinent information. User/operator **34** is able to lockdown or open any doors in the facility, and can view real time door status via building display **40**. Preferred building display **40** shows a building map as well as each door location and its status, for example, a color red indicating a locked door and the color green indicating an unlocked door. If gunshot detection **36** executes program **38** this information is sent to building display **40** for status information. Along with providing status information

execute program **38** notifies law enforcement by dialing 911 and/or notifies building officials **46.** Simultaneously, door systems **48** are locked pursuant to the programmed scenarios and sent to building display **40** for status information. In the manual mode, if user/operator **34** manually triggers a scenario, the door system **48** locks specific doors to contain the shooter in a specific area. Once a manual trigger is initiated, for example by a lockdown button being depressed, or a gunshot detected, the EAGL will execute the scenarios that were programed based on the specific area where the intruder is physically located or the location of the detected gunshot.

Figs. 3A, 3B, and 3C are a three-part flow chart showing the preferred method for programming the lockdown scenarios for implementation upon a triggering event for a specific building implementation. This method describes the preferred method; however, one or more systems can be added or deleted depending on the components contained in the subject buildings. For example, if the building does not have a PA system, the system can still be used, but there will be no public announcement. In another example, the system can also trigger items such as flashing lights, smoke dispersion, distracting audio noises, and the like. This disclosure is intended to include these variations.

In order to access the system, a user name and password are entered **50**. This presupposes the creating of a user name and password (not shown). User name and/or password can be edited **52** by user **54**. The scenario planning and programming can only be accessed by an administrator (not user) privileged in this preferred method. This information is fed to integrator **56** to create users and administrator database **58**. Database **58** is populated with building name, server IP, user name, and password **60**. For each customer location and building name, the access control server IP is preferably entered. Next, door groups **62** are selected and entered and can also be displayed. EAGL will import all the door groups **62** that are defined in CPU **24**, and will allow the user to choose a door group **62** or multiple door groups to be locked during a lockdown in a building. If there are more buildings **64** a “yes” feedback loop **66** takes the administrator back to step **60** to

enter the next building information. This can be repeated until all of the subject buildings are entered. If there are no further buildings **68**, the next step is to create a map **70,** which preferably contains a building name, address, door location for each building, and a location of each sensor or gunshot detector in each building. In a preferred system, once the building address is entered, the EAGL displays a google map of that building. The administrator can center the building at the center of the display area and will size it accordingly. The administrator preferably selects from the list of the door names, and drags and places them on the building map in its appropriate location. He/she can also place the gunshot detectors on the map. If there are more buildings **72** a feedback loop **74** repeats step **70** until all of the building door and gunshot detectors are mapped.

Once there are no further buildings for entry **76**, a building name and PA system information **78** is entered. This administration program can include a PA system computer path/IP address and entry of the message or messages for storage and broadcast for the different scenarios. If there are more buildings **80**, a feedback loop **82** requests additional building PA system setups **78** until no further building PA systems **84** exist.

Next, the administrator enters a computer path to direct gunshot data or results for display or additional messages to be broadcast after gunshot detection **86**. This data can be sent to more or other command centers **88**.

The administrator then enters the building name for each gunshot detector location, and the IP address of the nearest camera **90** for set up to that sensor in each building. Each camera display path is entered with camera IP and map location **92** for that building. If there are further buildings **94**, feedback loop **96** allows for further camera setups **90** until all buildings are included and no other building needs entry **98**. Next, all camera setups are displayed **100** and the administrator can edit **102** any of the previous entries to optimize the system until complete **104**.

Another feature that can be included in the administrator programing is a dialer with emergency 911 and building security office and management to alert them of a manual or gunshot trigger of the system (not shown).

A unique feature of the presently claimed invention is the dynamic creation and selection of scenarios for triggering in the event of an active shooter, or the like. Figs. 4, 5, and 6 along with Fig. 2 illustrate the system to create and select scenarios for active shooter events. Fig. 4 is an example of a two building scenario. Although the example illustrates only two buildings, this disclosure specifically includes multiple buildings, which can use the same components and steps as set forth in the example. In this example, there is building A **120** and a Building B **122** on the same location. Building A **120** has an EAGL controller A **124** along with EPLEX server A **128** and building B **122** has EAGL controller B **126** along with EPLEX controller B **130**. In an active shooter event in building A **120**, EAGL controller A **124** sends a lock all doors command **132** to EPLEX server A **128** and a leave the building message **134** to PA system A **136**. Simultaneously, EAGL controller A **124** sends a lock external doors command **138** to EPLEX server B **130** and a stay inside building message **140** to PA system B **142**. The inverse scenario can take place when an active shooter event is detected in building B **122**.

Fig. 5 shows a display of single building **120** in a normal status. Each door in the buildings has an electronically controlled lock **26**, and the locks are controlled by one or more EAGL controllers. In this display, unlocked doors **26'** are depicted as an open lock and locked doors **26"** are depicted as a closed lock. Fig. 5 shows a building display in a normal mode. A preselected number of doors are unlocked **26'** during normal operational mode to allow building access during normal business hours. Some doors can be locked to restrict access. (Not shown). Gunshot detectors or sensors **22** are strategically placed inside of building **120** so that a location can be determined by triangulation, or similar manner based on the sensor data. Audio/visual systems or cameras **90** are also strategically placed in building **120** so that they can be pointed, either automatically or manually towards a location of a detected gunshot.

For this example, assume a shot is fired and is detected by gunshot detectors **22** and a gunshot location **36** is automatically determined in building A **120**. In this scenario, all of the doors are automatically locked **26"** and at least one of the closest cameras **90** are aimed towards the located gunshot **36**. In this scenario, if the intruder is contained by locked doors **26"**, other doors in the building can be opened to allow legal building occupants to exit the building. (Not shown).

As shown in the figures the EAGL response can be programmed as follows:

1. Lock all the doors **26"** in Building A **120** (the preferred system exit is always allowed).
2. Lock all the external doors **26"** in Building B **122**.
3. Show the map door lock status **26** on a building display **40**, and show on the map the location and coordinates of the shooter **140**.
4. Display across the EAGL screen **40** location **36**, a time and the caliber weapon was used.
5. Call 911 **46** and the rest of the building officials letting them know that gunfire was detected at building A **120**.
6. Send e-mail, text, and mass notification messages **142**.
7. Direct the closest camera **28** to the shooter and display that information on the EAGL display **40**.
8. Activate the PA systems **30** in Building A **120** and B **122**, and send the appropriate messages to Building A and B's PA system. The preferred message transmitted in Building A **120** can be "evacuate the building" and the preferred message broadcast in Building B **122** can be "stay inside the building".

Many of these steps are in the alternative, meaning that they can be omitted or expanded, depending on the site layout and building use. A different scenario is then programmed for a different part of Building A and also for the differing portions of Building B and Building N (next). These scenarios are preprogrammed into EPLEX servers **24** and are automatically selected and implemented depending on the location of the shot detection.

When a gunshot is detected, the EAGL will execute the scenarios that were programmed per building, lock the programmed doors per building, and display the shooter location. It will then send preselected PA messages, display the video stream of the camera at the location, and alternatively dial 911 and all other programmed numbers. The preferred software is running on a Linux based computer that allows the execution of the scenarios in a very short period of time and it is functional twenty-four hours a day, seven days a week.

The new features are the broad integration of this system with multiple external systems and the ability to control access and control doors remotely. The traditional way of locking down buildings manually by humans would not provide instant lockdown or precious time needed for building occupants to escape and survive an active shooter. The presently claimed system response time is approximately twenty seconds from the time the gunshot is detected to the time the door is locked and law enforcement notified.

Although the presently claimed invention has been described in detail with particular reference to these preferred embodiments, other embodiments can achieve the same results. Variations and modifications of the presently claimed invention will be obvious to those skilled in the art and it is intended to cover all such modifications and equivalents. The entire disclosures of all references, applications, patents, and publications cited above, are hereby incorporated by reference.

CLAIMS

What is claimed is:

1. A method comprising:

providing a plurality of predetermined sequences of security measures for differing scenarios of an active shooter event;

detecting a gunshot; and

automatically activating at least one predetermined security measure upon detection of the gunshot and a location of the detected gunshot, wherein the predetermined security measures comprise locking a predetermined number of doors.

2. The method of claim 1 wherein the step of providing a plurality of predetermined sequences is based on user defined parameters comprising a building layout, a number of doors, a location of the detected gunshot and whether the building is populated and/or wherein the step of locking a predetermined number of doors comprises preventing the active shooter from exiting from a predetermined area and/or further comprising providing location coordinates of the detected gunshot and/or further comprising directing at least one camera towards the location coordinates and/or wherein the predetermined security measures further comprise mapping a status of all doors in one or more buildings, automatically calling 911 advising of the detection, notifying subscribed mobile devices of the detection, and activating a public announcement (PA) system with a preprogramed announcement.

3. A non-transitory computer-executable storage medium comprising program instructions which are computer-executable to implement an automatic lockdown system comprising:

program instructions that cause entry of a plurality predetermined sequences of security measures for differing scenarios of an active shooter event;

program instructions that cause a detection of a gunshot;

program instructions that cause an automatic activation of at least one predetermined security measure upon detection of the gunshot and a location of the

detected gunshot, wherein the predetermined security measures comprise locking a predetermined number of doors.

4. The non-transitory computer-executable storage medium of claim 3 wherein the program instructions that cause the entry of a plurality of predetermined sequences is based on user defined parameters comprising a building layout, a number of doors, a location of the detected gunshot and whether the building is populated and/or wherein the program instructions that cause a predetermined number of doors to be locked comprises preventing the active shooter from exiting from a predetermined area and/or further comprising program instructions that cause location coordinates of the detected gunshot be provided and/or further comprising program instructions that cause at least one camera be directed towards the location coordinates and/or wherein the predetermined security measures further comprise program instructions to map a status of all doors in one or more buildings, to automatically call 911 advising of the gun shot detection, to notify subscribed mobile devices of the detection, and to activate a public announcement (PA) system with a preprogramed announcement.

5. A system for locking down a facility, comprising;

one or more Central Processing Units (CPU's) configured to enter and store a plurality of predetermined door locking scenarios;

one or more gunshot detecting units;

one or more system control units couple to the one or more CPUs and the one or more gunshot detecting units configured to automatically initiate a predetermined scenario from the plurality of scenarios in response to signals generated by the one or more gunshot detecting units; and

one or more door locking units configured to automatically lock one or more predetermined door locks based on signals from the one or more system control units.

6. The system of claim 5 wherein the plurality of predetermined door locking scenarios are based on user defined parameters comprising a building

layout, a number of doors, a location of the detected gunshot and whether the building is populated and/or wherein the CPU's and system control units are configured to prevent the active shooter from exiting from a predetermined area and/or wherein the CPU's and system control units are configured to provide location coordinates of the detected gunshot and/or wherein the CPU's and system control units are configured to direct at least one camera towards the location coordinates and/or wherein the predetermined scenarios further comprise mapping a status of all doors in one or more buildings, automatically calling 911 advising of the gun shot detection, notifying subscribed mobile devices of the detection, and activating a public announcement (PA) system with a preprogramed announcement.

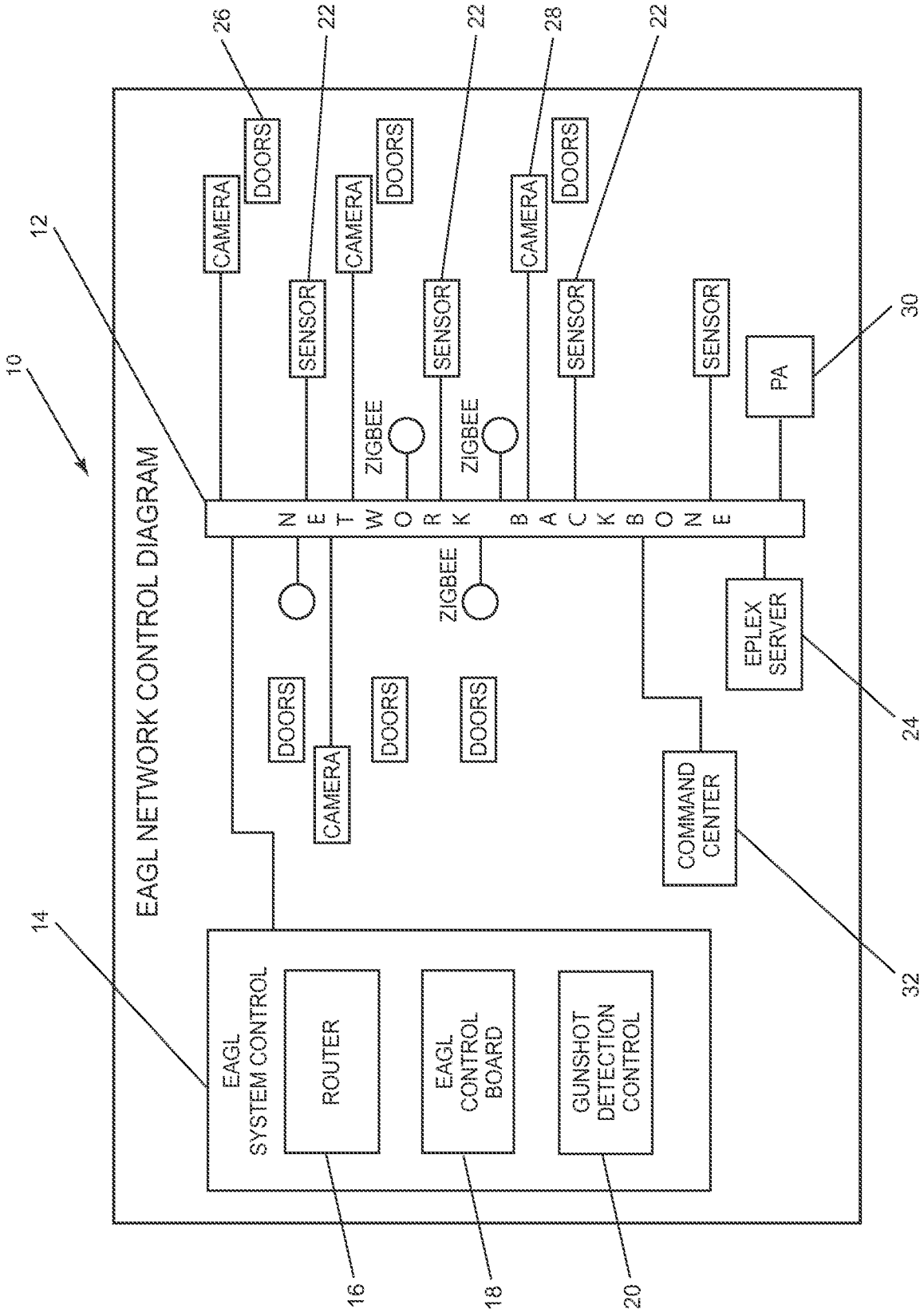
EAGL NETWORK CONTROL DIAGRAM
10
12
14
16
18
20
22
22
22
24
26
28
30
32
CAMERA
DOORS
SENSOR
ZIGBEE
NETWORK
BACKBONE
PA
EPLEX SERVER
COMMAND CENTER
EAGL SYSTEM CONTROL
ROUTER
EAGL CONTROL BOARD
GUNSHOT DETECTION CONTROL

FIG. 1

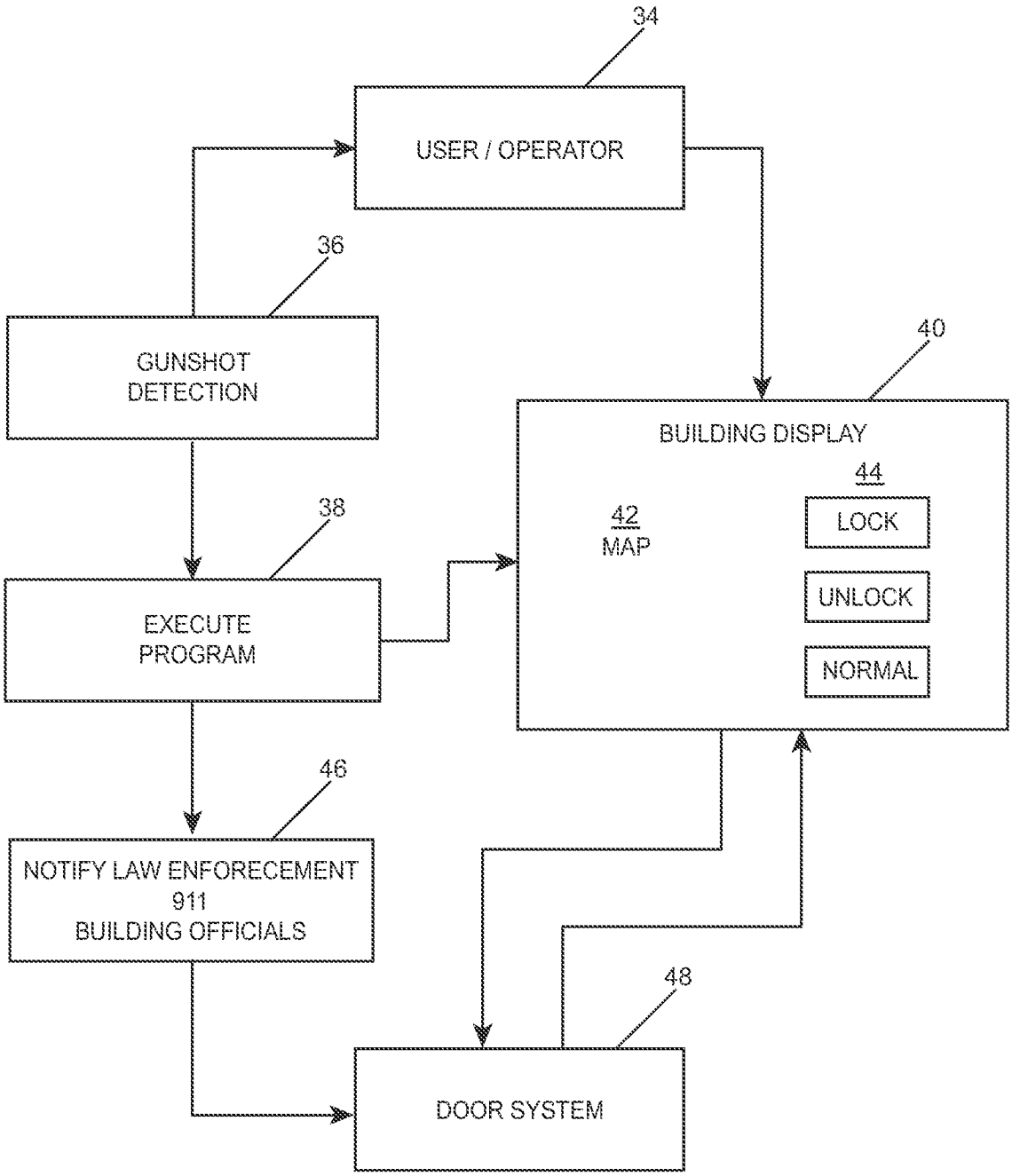
34
USER / OPERATOR
36
GUNSHOT DETECTION
40
BUILDING DISPLAY
44
42
MAP
LOCK
UNLOCK
NORMAL
38
EXECUTE PROGRAM
46
NOTIFY LAW ENFORECEMENT
911
BUILDING OFFICIALS
48
DOOR SYSTEM

FIG. 2

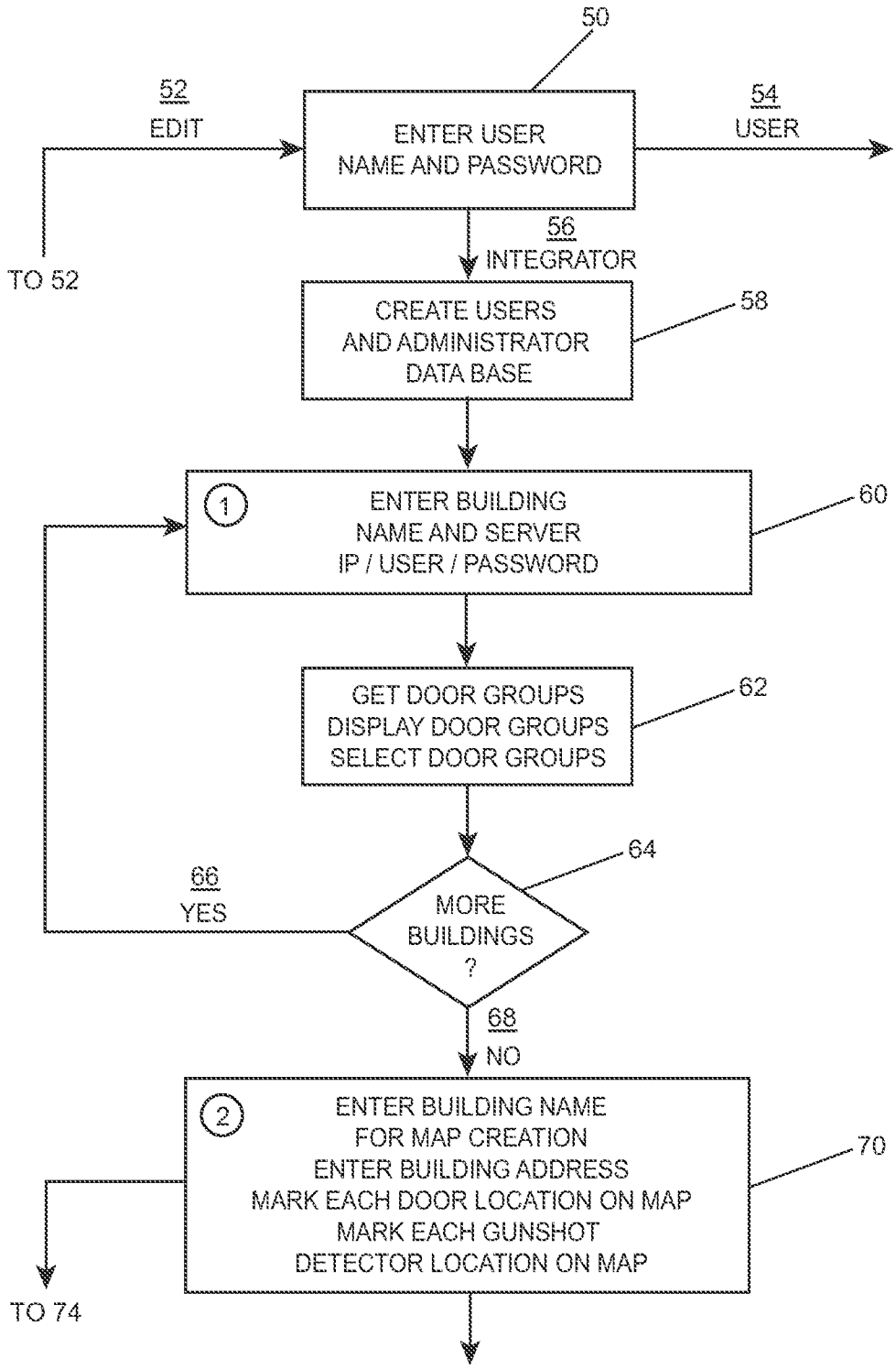
50
52
EDIT
ENTER USER
NAME AND PASSWORD
54
USER
TO 52
56
INTEGRATOR
CREATE USERS
AND ADMINISTRATOR
DATA BASE
58
1
ENTER BUILDING
NAME AND SERVER
IP / USER / PASSWORD
60
GET DOOR GROUPS
DISPLAY DOOR GROUPS
SELECT DOOR GROUPS
62
64
66
YES
MORE
BUILDINGS
?
68
NO
2
ENTER BUILDING NAME
FOR MAP CREATION
ENTER BUILDING ADDRESS
MARK EACH DOOR LOCATION ON MAP
MARK EACH GUNSHOT
DETECTOR LOCATION ON MAP
70
TO 74

FIG. 3A

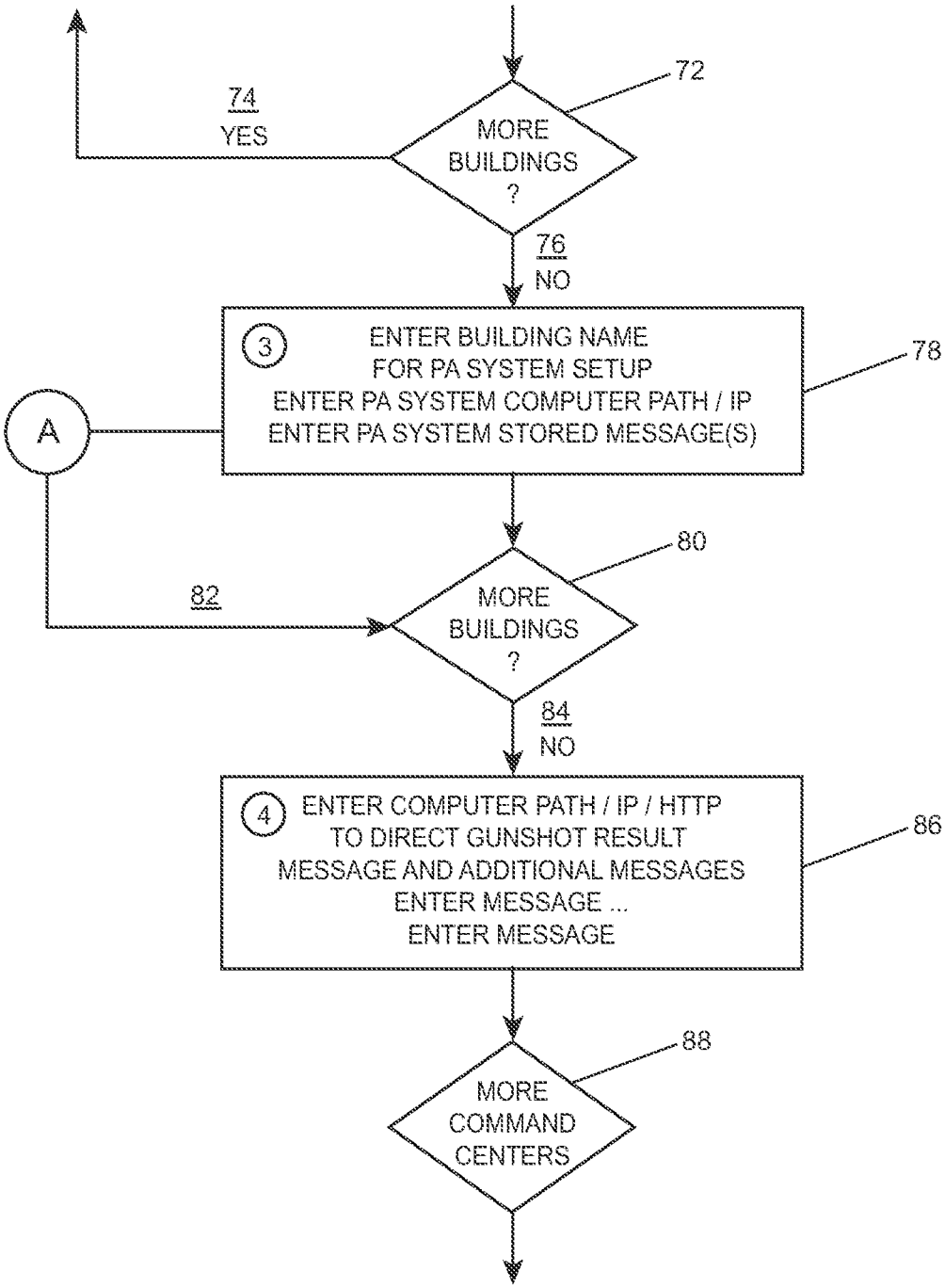
72
74
YES
MORE BUILDINGS ?
76
NO
3
ENTER BUILDING NAME
FOR PA SYSTEM SETUP
ENTER PA SYSTEM COMPUTER PATH / IP
ENTER PA SYSTEM STORED MESSAGE(S)
78
A
80
82
MORE BUILDINGS ?
84
NO
4
ENTER COMPUTER PATH / IP / HTTP
TO DIRECT GUNSHOT RESULT
MESSAGE AND ADDITIONAL MESSAGES
ENTER MESSAGE ...
ENTER MESSAGE
86
88
MORE COMMAND CENTERS

FIG. 3B

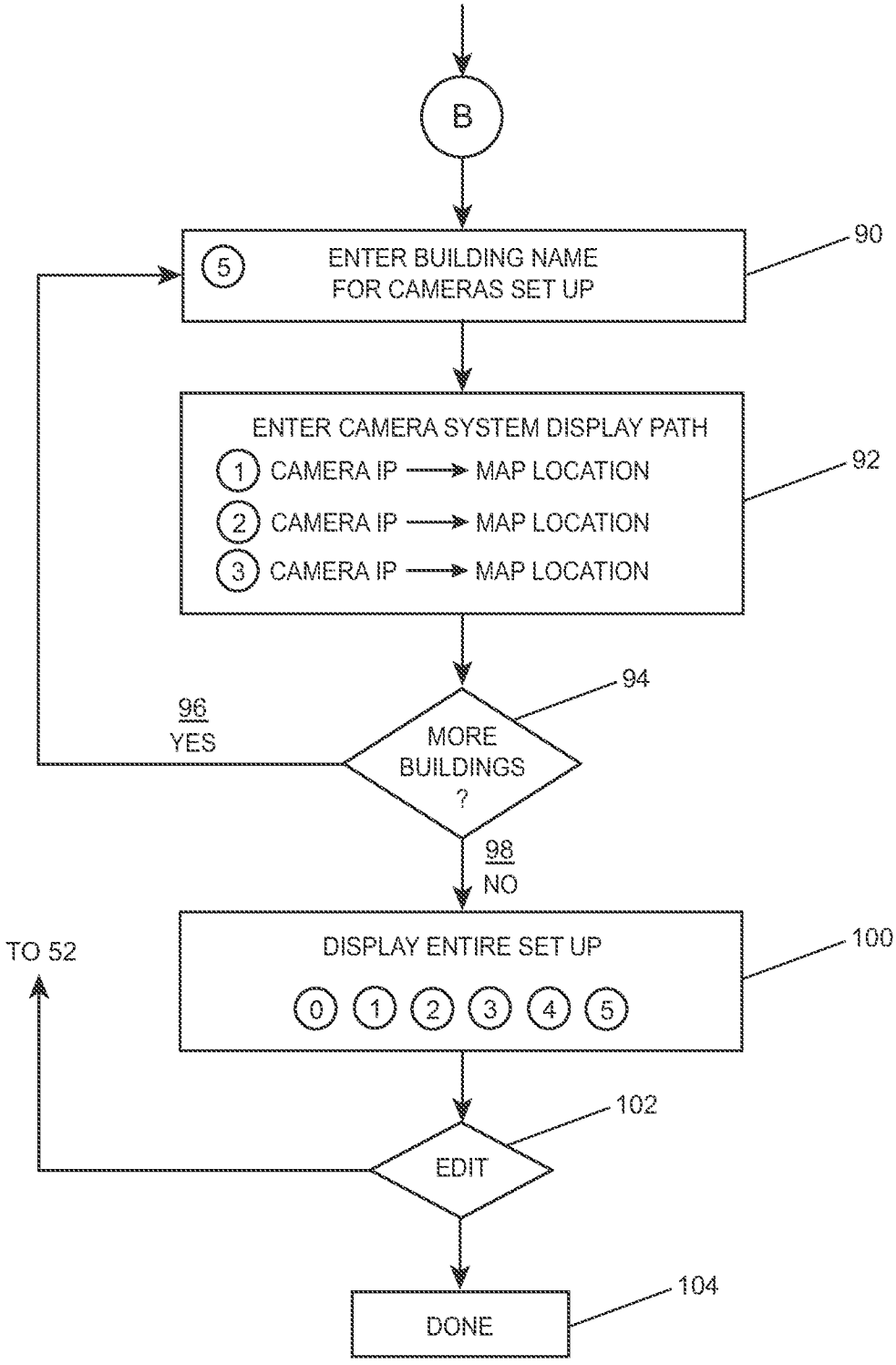
B
5
ENTER BUILDING NAME
FOR CAMERAS SET UP
90
ENTER CAMERA SYSTEM DISPLAY PATH
1 CAMERA IP → MAP LOCATION
2 CAMERA IP → MAP LOCATION
3 CAMERA IP → MAP LOCATION
92
94
96
YES
MORE
BUILDINGS
?
98
NO
TO 52
DISPLAY ENTIRE SET UP
0 1 2 3 4 5
100
102
EDIT
DONE
104

FIG. 3C

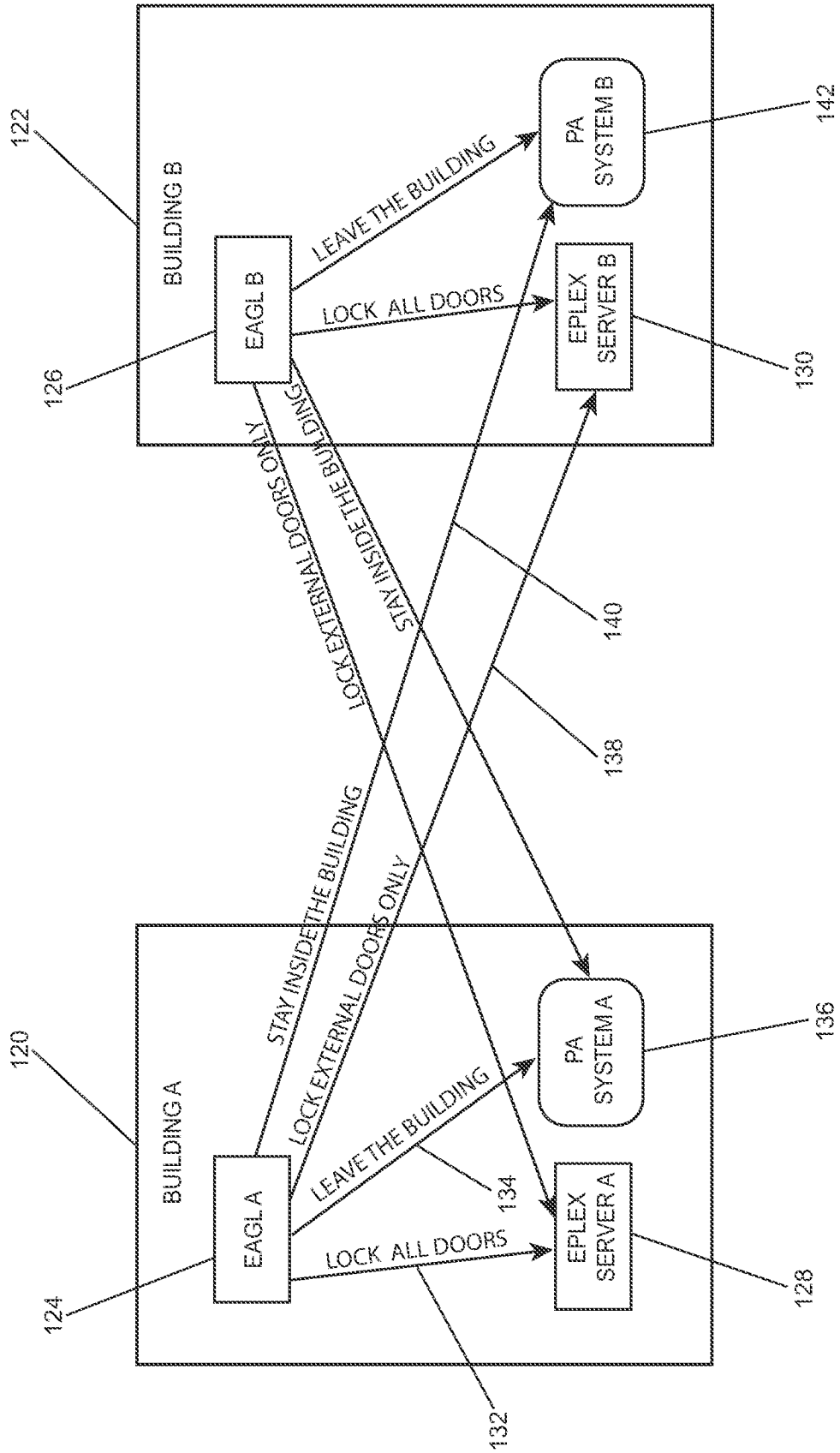
BUILDING B
122
EAGL B
126
LEAVE THE BUILDING
LOCK ALL DOORS
PA SYSTEM B
142
EPLEX SERVER B
130
LOCK EXTERNAL DOORS ONLY
STAY INSIDE THE BUILDING
140
138
BUILDING A
120
EAGL A
124
STAY INSIDE THE BUILDING
LOCK EXTERNAL DOORS ONLY
LEAVE THE BUILDING
134
LOCK ALL DOORS
132
PA SYSTEM A
136
EPLEX SERVER A
128

FIG. 4

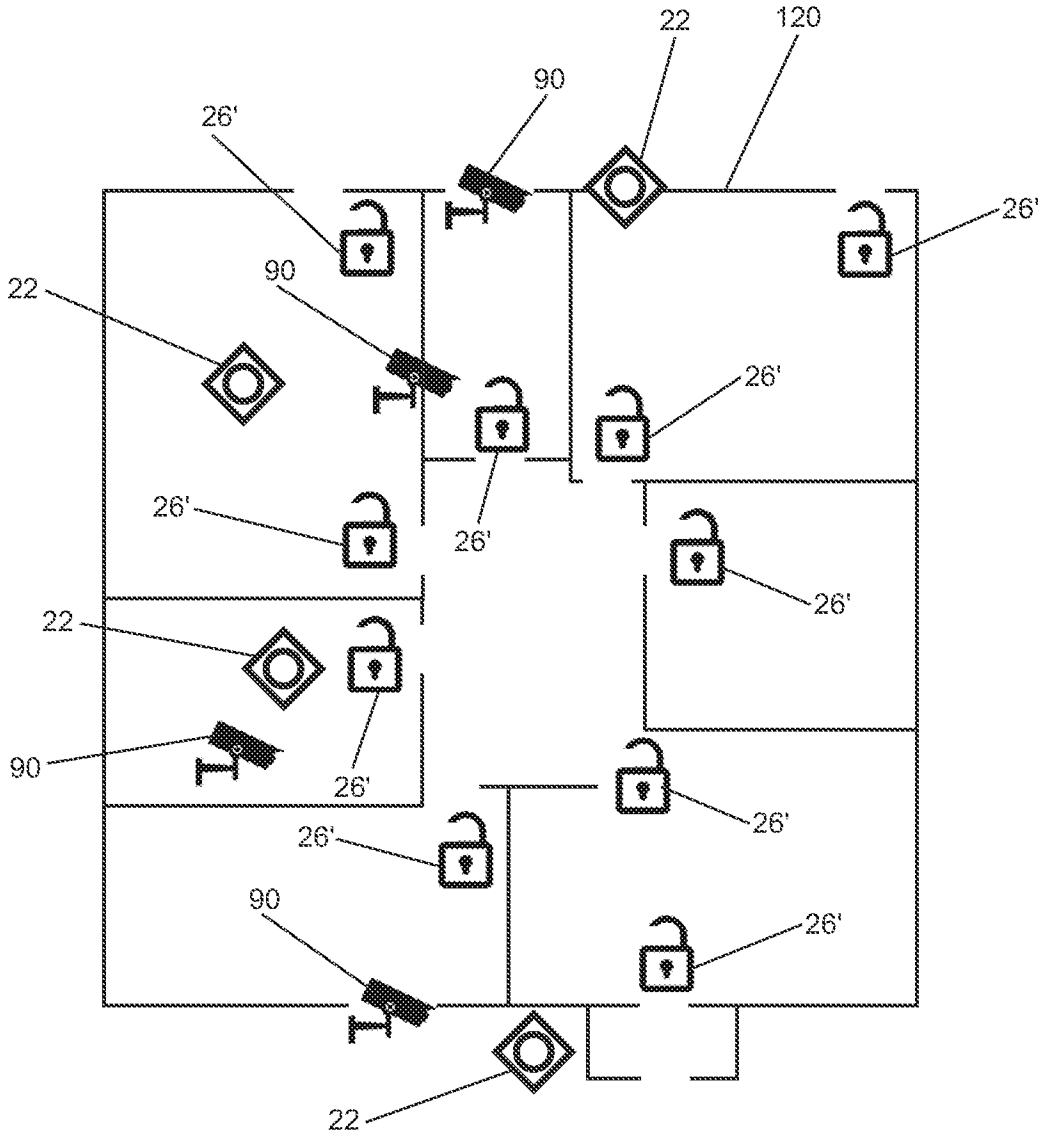

FIG. 5

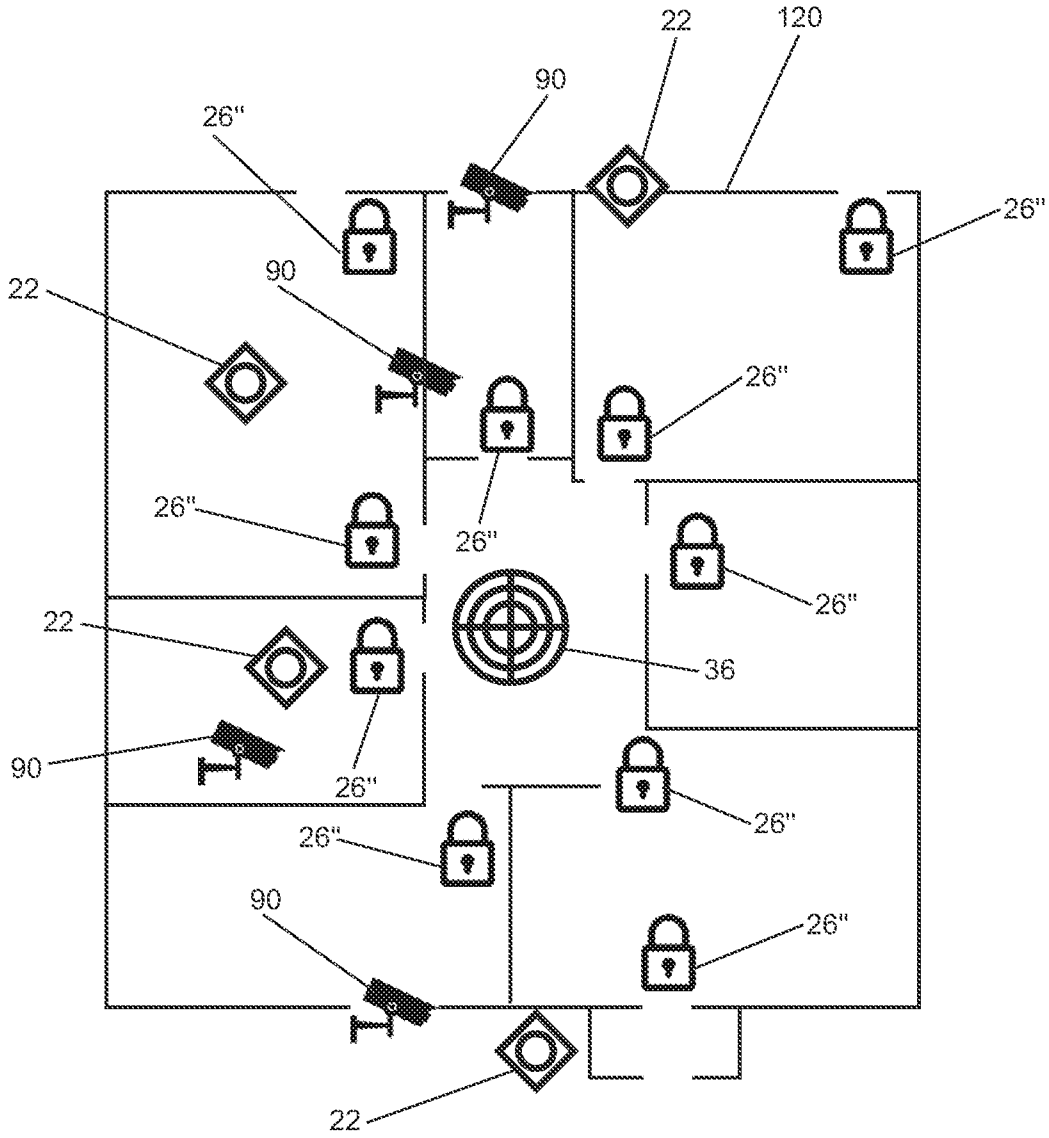

FIG. 6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US17/58691

A. CLASSIFICATION OF SUBJECT MATTER

IPC - G08B 17/08, 13/16, 21/02; H04W 4/22 (2017.01)

CPC - G08B 17/08, 13/1672, 13/19697, 21/02; H04W 4/22; G06Q 50/265

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)

See Search History document

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

See Search History document

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

See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2016/0232774 A1 (NOLAND, B et al.) 11 August 2016; figure 2A; paragraphs [0016], [0033], [0135], [0164], [0232].	1-6
A	US 2014/0269199 A1 (SUPERVENE LLC) 18 September 2014; entire document.	1-6
A	US 9,354,619 B2 (ERGENBRIGHT, C et al.) 31 May 2016; entire document.	1-6

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"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)

"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

"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

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
27 December 2017 (27.12.2017)	05FEB 2018
Name and mailing address of the ISA/ Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-8300	Authorized officer Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (January 2015)