

1) Wireless Alarm System

Priority Date [US5625338A](#), CA2111929A1, CA2111929C, WO9516980A1, AU1104095A, EP0734560B1,
December 16, 1993 EP0734560A1, DE69413848T2.

A security system having a two way wireless keypad which operates in a particular manner for improved operation. The keypad processes information to effectively reduce communications between the control panel and the keypad. The keypad selectively activates and deactivates a transmitter and receiver arrangement for power conservation reasons. The system provides confirmation of communications between the keypad and the control panel to increase the reliability of the system.

2) Method And Arrangement For Recognition Of A Coded Transmitted Signal

Priority Date [US5517518A](#), CA2128587A1, AU2508195A, AU692260B2
July 21, 1994

The present invention is for fast, reliable recognition of coded signals where the signal includes a predetermined code sequence in a lead portion thereof. This has particular application in spread spectrum transmission and receptions. The code sequence is a long sequence of bits known to the receiver which breaks the long sequence into a series of bit segments which are more easily analysed. Each series of bits is analysed for a direct match and a decision whether a code segment has been received is based on the number of direct matches. For example, if there are 8 bit segments, each 16 bits in length, high reliability has been achieved if two direct matches are received within a time period corresponding to the transmission time of the code sequence. This system can also be used for assessing signal strength where many matches indicate good signal strength, approximately 50% indicates moderate signal strength, and less indicating poor signal strength.

3) Security System With Two Signal Reporting

Priority Date [US5956388A](#), CA2203323A1, CA2203323C, WO9848564A1, AU7022598A
April 22, 1997

A security system having two distinct channels of communication and which uses a single communication device provides improved security. The system monitors a host of security alarm panels connected to a telephone system. A status signal is communicated between each control panel and a scanner placed at a switching station of the telephone system to confirm the integrity of the communication channel. An alarm event continues to be reported to a monitoring station using the telephone system in the normal manner.

4) Home Automation And Security System Controller

Priority Date [CA2203591A1](#), WO9849663A1, EP0978111A1, EP0978111B1, AT209385T, PT978111E,
April 24, 1997 DE69803282T2, DK0978111T3, ES2168748T3

The present invention, in one aspect, is directed to a security system which is capable of acting as an information display for display of user selected information not directly related to the security system. Such information may include weather information, news reports, sports information and financial information, the display of such information is preferably under user control and is selectable to be customized for each individual user. The security system includes an interface means for communicating with a data access provider for retrieval of the user selected information for display on the keypad controller. In another aspect, the present invention is directed to a controller for controlling the function of components of a security system. The controller has a graphical interface comprising a display screen capable of displaying a graphical representation of the security system and the components on the screen and graphical representation of the user selected information. The graphical display may include a touch screen such that the function of the components of the security system are controlled by touching a portion of the screen having the component or security system to be controlled displayed thereon.

5) Controllable Still Frame Video Transmission System

Priority Date [US6642954B1](#), CA2301858C, CA2301858A1, WO9911069A1, AU4006797A, EP1010328A1,
August 25, 1997 EP1010328B1, AU749600B2, DE69713405T2

A video capture controller for selective capture of video images from a plurality of video cameras, the capture controller having multiple video signal inputs for receiving signals from video source devices, an arrangement for receiving input signals from a security system, a processor for processing the received input signals of such arrangement and comparing the received signals with a predetermined set of possible received signals and, based thereon, determining a particular video capture protocol from a set of video capture protocols associated with the set of possible received signals, and a controller associated with the multiple video signal inputs and the processor, the controller having a video output, the controller selectively connecting the multiple video inputs with the video output based on the particular protocol determined by the processor.

6) Programmable Temperature Sensor For Security System

Priority Date [US6215405B1](#), CA2235654C, CA2235654A1, WO9956261A1, AU3402099A, EP1074009B1,
April 23, 1998 EP1074009A1, AT214505T, DK1074009T3, DE69901027T2, ES2174598T3

The present invention in one aspect, provides for a programmable temperature sensor for a device as part of a security or alarm system. The programmable temperature sensor is capable of having multiple set points programmed, each set point individually programmable as to effect. In a preferred embodiment of the invention, there is provided a keypad controller having a programmable temperature sensor for use in an alarm system. The keypad controller includes an input for allowing a user to interface with the keypad controller and an alarm system to which the keypad controller is connected, an output display for providing one or more of visual and auditory feedback to a user on the status of the system, an interface for communicating with an alarm control panel of an alarm system, a processor for processing inputs from the input or an alarm control panel and causing the appropriate information to be provided to the output display, and a programmable temperature sensor for monitoring the temperature in the space in which the keypad controller is to be located, the temperature sensor being provided with at least one alarm set point programmable as to level.

7) Suspended Code For Alarm System

Priority Date [US6078254A](#), CA2247600C, CA2247600A1
September 17, 1998

The system generates alarm suspension codes without direct interaction with the alarm panel. The alarm control panel generates its own suspension codes for checking for proper validation when a suspension code is entered. The alarm panel generates suspension codes sequentially and will recognize any of several suspension codes that are current. The entry of a later suspension code cancels all earlier suspension codes.

8) Biometric Input Device For Security System

Priority Date [CA2256809A1](#), CA2256809C, WO0038118A1, AU1764500A
December 21, 1998

The present invention provides for a biometric input device for a security system. The biometric input device includes a biometric sensor for sensing and input of biometric data, an image capture module for capturing and storage of the inputted biometric data from the biometric sensor, and an input/output module for passing the captured biometric data to a control panel and receiving data from the control panel. The invention also provides for a security system for controlling access to a premises. The security system includes a control panel for overall control of the security system, and one or more input devices for allowing users to interact with the security system., One or more of such input devices is a biometric input device capable of sensing biometric data from a user and capable of passing said sensed biometric data to the control panel for comparison against a database of biometric data of authorized users.

9) Dual Mode Panel

Priority Date [US6380850B1](#), CA2258817A1, CA2258817C, WO0041152A1, AU1765100A, EP1149370B1,
January 5, 1999 [EP1149370A1](#)

A dual mode alarm control panel includes a sensing arrangement for determining conditions of the environment in which the panel is installed. The results of the environmental assessment are used to determine an operating mode of the panel. In a first mode the panel is fully functional, and in a second mode the functions of the panel are restricted. This process assists in operating alarm control panels in an environment corresponding to the assumed design environment. In this way, non-compliance or operating alarm panels in unsuitable environments is reduced or avoided.

10) Alarm System Using Local Data Channel

Priority Date [US6252504B1](#), US6895082B2, US2002029147A1, CA2260680A1, CA2260680C
February 2, 1999

An alarm system has an alarm unit in combination with a line seize module. The alarm unit includes a transmitter/receiver, a control panel function, a key pad, an input/output port connected to a telephone line and an auto dialer for normally communicating with a remote monitoring station over the public switched telephone network. The line seize module includes an input communication port connected to the telephone line, a signal transmitter and receiver for communication over telephone wiring with the alarm unit, control logic, a line seize arrangement and an automatic dialer. Control logic processing signals are received by the input port. The line seize module, upon receiving an alarm signal from the alarm unit, reports the signal to a remote monitoring station using the automatic dialer and the public switched telephone network.

11) Alarm System With Programmable Device Control

Priority Date [CA2300465A1](#)
March 10, 2000

An alarm system providing programmable remote control of electrically controlled devices, such as lights, is provided. Geographic site and date information is provided to the alarm system. The parameters used to dictate the activation and deactivation of the controlled devices include the geographic site location and the sunrise and sunset times for the current date at that site. Accordingly, the activation and deactivation times of the controlled devices be programmed to automatically track the shifting sunset and sunrise times at the site.

12) Security Alarm Keypad With Message Alert

Priority Date CA2300468C, [CA2300468A1](#)
March 10, 2000

A security alarm system is adapted to retrieve e-mail status information and provide an alert signal for the user of the system that e-mail has been received and is awaiting retrieval. Preferably, the keypad of the security system includes a visual indicator which is activated when e-mail is received. The security alarm system uses the control panel and the auto dialer associated therewith, to contact the e-mail server and receive status information of one or more e-mail accounts. The control panel can contact the e-mail provider on a predetermined basis, or on a user scheduled basis. The accounting system's capability to initiate telephone communications and process signals from a remote computer is advantageously used for e-mail retrieval.

13) Remote Recovery Arrangement For Alarm System

Priority Date [CA2300648A1](#)
March 10, 2000

A security alarm system cooperates with a remote monitoring station to improve the reliability of the alarm system. The alarm system includes a control panel which during communications with the remote monitoring station, receives information used for the operation of the system and preferably provides information for storage by the remote monitoring station which information is recovered by the control panel if necessary.

14) Security Alarm Keypad With Message Alert

Priority Date [US6362747B1](#)

May 15, 2000

A security alarm system is adapted to retrieve e-mail status information and provide an alert signal for the user of the system that e-mail has been received and is awaiting retrieval. Preferably, the keypad of the security system includes a visual indicator which is activated when e-mail is received. The security alarm system uses the control panel and the auto dialer associated therewith, to contact the e-mail server and receive status information of one or more e-mail accounts. The control panel can contact the e-mail provider on a predetermined basis, or on a user scheduled basis. The accounting system's capability to initiate telephone communications and process signals from a remote computer is advantageously used for e-mail retrieval.

15) Remote Recovery Arrangement For Alarm System

Priority Date [US6366211B1](#)

May 15, 2000

A security alarm system cooperates with a remote monitoring station to improve the reliability of the alarm system. The alarm system includes a control panel which during communications with the remote monitoring station, receives information used for the operation of the system and preferably provides information for storage by the remote monitoring station which information is recovered by the control panel if necessary.

16) Alarm System With Programmable Device Control

Priority Date [US6310547B1](#)

May 26, 2000

An alarm system providing programmable remote control of electrically controlled devices, such as lights, is provided. Geographic site and date information is provided to the alarm system. The parameters used to dictate the activation and deactivation of the controlled devices include the geographic site location and the sunrise and sunset times for the current date at that site. Accordingly, the activation and deactivation times of the controlled devices be programmed to automatically track the shifting sunset and sunrise times at the site.

17) Integrated Lightning Detector

Priority Date [US6960995B2](#), US2004257216A1, CA2418673C, CA2418673A1

February 7, 2003

An alarm panel of a security system is additionally provided with an interference circuit for evaluating the possible presence of a large electromagnetic interference signal such as lightning. The earth ground connection of the alarm panel to a power source is used to provide an input to the interference circuit. The earth ground connection receives large transient signals caused by such naturally occurring events. The alarm panel uses this additional information to modify the reporting of alarm conditions. This has particular application for addressing problems associated with motion detectors falsely triggering when a large electromagnetic signal is received. The solution of the alarm panel sensing this condition in contrast to each detector sensing this condition is more reliable, allows combining of detector information and is more cost effective.

18) False Alarm Reduction Method And System

Priority Date US2006192666A1, [US7323978B2](#)

February 16, 2005

A digital verification control, which is incorporated with an alarm system, includes a first timer device for presetting a single zone verification time in the control panel and second timer device for presetting a multiple zone verification time in the control panel. The single zone verification time is a single detector time delay and arranged when one of the sensors detects at least two triggered signals in the respective detecting area within the single zone verification time, the local warning system is activated for producing a local warning signal., The multiple zone verification time, which is longer than the single zone verification time, is a multiple detector time delay and arranged when the two sensors detect two triggered signals in the detecting areas respectively within the multiple zone verification time, the local warning system is activated for producing the local warning signal.

19) Security Device With Built-In Intercommunicated False Alarm Reduction Control

Priority Date US2006250231A1, [US7248155B2](#)

May 6, 2005

A security device includes a plurality of security detectors intercommunicating with each other. Each of the security detectors includes a first device for verifying a single zone verification time of the respective security detector and a second device for verifying a multiple zone verification time with another security detector corresponding to a distance between two security detectors at two different detecting areas. When one of the security detectors detects at least two triggered signals in the respective detecting area within the single zone verification time, the respective security detector activates the local warning system to produce a local warning signal., When two security detectors are intercommunicated with each other to detect two triggered signals in the detecting areas respectively within the multiple zone verification time, at least one of the security detectors activates the local warning system to produce the local warning signal.

20) Integrated Detecting Processor

Priority Date [US2007114413A1](#)

November 18, 2005

An infrared sensor includes an infrared generator for generating infrared radiation within a detecting area, a pyroelectric sensor, a microprocessor, and an integrated detecting processor. The pyroelectric sensor is electrically communicated with the infrared generator, wherein the infrared radiation as an input signal is converted into a DC signal as an output signal having a real signal with low frequency and a noise signal mixed therewith. The microprocessor includes an A/D converter electrically connected with the pyroelectric sensor, wherein the microprocessor is arranged to receive the DC signal for data processing. The integrated detecting processor, which is electrically connected with the microprocessor, is adapted for stripping out the DC signal from the pyroelectric sensor to control a DC level of the DC signal, such that the real signal is allowed to be accurately processed in the microprocessor without data overflowing.

21) Energy Signal Detection Device Containing Integrated Detecting Processor

Priority Date [US2007114414A1](#)

November 18, 2005

An energy signal detection device includes a pyroelectric sensor sensing an infrared radiation within a detecting area, a microprocessor, and an integrated detecting processor. The infrared radiation as an input signal is converted into a DC signal as an output signal having a real signal with low frequency and a noise signal mixed therewith. The microprocessor includes an ADC converter electrically connected with the pyroelectric sensor, wherein the microprocessor is arranged to receive the DC signal for data processing. The integrated detecting processor is adapted for stripping out the DC signal from the pyroelectric sensor to control a DC level of the DC signal, such that the real signal is allowed to be processed in the microprocessor without data overflowing.

22) Process And System Of Energy Signal Detection

Priority Date [US7546223B2](#), US2007288108A1, US2008218361A1, EP2035992A2, EP2035992A4,
June 7, 2006 WO2008048365A3, WO2008048365A2, CN101573709A

A process and system of energy signal detection, which improves sensitivity, performance and reliability thereof and reduces false alarms by distinguishing between noise and real signals, includes the steps of receiving a plurality of data samples and generating a predetermined number of constructed sample windows of constructed samples in time, determining a control range for each of said constructed sample windows, determining whether there is an alarm pre-condition by comparing relationship between successive constructed sample windows, and generating an output signal when the alarm pre-condition is qualified.

23) Process And System Of Power Saving Lighting

Priority Date [US8194061B2](#), US2009039797A1
August 9, 2007

A process and system of lighting with green energy source and intelligent power management, which saves energy consuming and limits pollution. The system is using solar power, green battery, and LED which are clean, long life, save, and energy saving. A microcontroller coordinates devices and sensors to optimize the operation of the system to generate illumination. The process includes the steps of sensing the environment, selecting power source, determining the energy output and driving the light device in order to most efficiently using energy and generate sufficient light for different purposes.

24) Process And System Of Energy Signal Detection

Priority Date [US20080218361](#), WO2009126300A2, WO2009126300A3, EP2271967A4, EP2271967A2
April 11, 2008

A process and system of energy signal detection, which improves sensitivity, performance and reliability thereof and reduces false alarms by distinguishing between noise and real signals, includes the steps of receiving a plurality of data samples and generating a predetermined number of constructed sample windows of constructed samples in time, determining a control range for each of said constructed sample windows, determining whether there is an alarm pre-condition by comparing relationship between successive constructed sample windows, and generating an output signal when the alarm pre-condition is qualified, and detecting white light for preventing false alarm created by the white light.

25) Single MCU-Based Motion Detection, Local Alarm And Supervisory Arrangement For Alarm System

Priority Date [US8410923B2](#), US2010219949A1
November 25, 2008

A device with single MCU-based motion detection, local alarm and supervisory arrangement for alarm system controlled by an alarm control panel (ACP) is disclosed. The device includes a sensor component to monitor environment, an output component to generate warning messages, a power supply component to provide power, and a microcontroller to communicate with sensor component, drive output component and monitor the status of ACP. The device can detect when intruders break in and make alarm warnings even when the ACP is destroyed. Plurality of devices and said ACP form a local warning matrix network (LWMN) to increase the detection area and scary effect to intruders. Each device of LWMN works independently when the ACP is destroyed.