James Parker

April 6th, 2016 jim@parsec.ca +1-416-302-7501

Electronic Security Systems & Sensors
Electronics R&D – Product Development

- Over 33 years' relevant industry experience, "hands on" to senior levels. Executive and strategic leadership.
- Past Vice President of Engineering for Digital Security Controls Ltd. (DSC), a leading global manufacturer of electronic security systems and components with sales exceeding $400 million annually. (www.dsc.com)
- Numerous products researched and developed including wired and wireless Alarm Systems, Motion Detectors, Solar Smart LED illuminators and many other similar devices.
- Named Inventor on over 25 patents.

Partial Client List: Cravath, Swaine & Moore LLP | Weil, Gotshal & Manges LLP
Fish & Richardson PC | Duane Morris LLP | Coleman Research Group
2GIG Technologies | Nest Labs | Alarm.com | AT&T Digital Life Inc.

Summary:

Technical, managerial and executive expertise in the research, development, design and manufacturing of electronic based products such as Security Systems, Burglar Alarm Systems, Intrusion Detection Systems, Home Automation Systems, Occupancy Detection Systems, Premise Monitoring Systems, Fresnel and Mirror Optic PIR (Passive Infra-Red) Motion Detectors, Microwave Doppler Motion Detectors, Solar Powered, Motion Controlled, LED illumination Systems and many other similar devices. From initial concept to mature production.

Executive and strategic leadership. Principal product architect. Highly credible with customers, distributors and suppliers. Extensive proven track record of commercially successful innovative product developments. In-depth knowledge of electronic product design in both wired and wireless technologies. Outstanding knowledge of environmental and false alarm immunity.

Excellent English language and presentation skills (accomplished presenter). Ability to explain complex technical material in a straight forward manner. International experience. Able to travel as required.

James Parker

List of Patents by Priority Date (James Parker as a Named Inventor)

- Wireless Alarm System (1993)
- Method And Arrangement For Recognition Of A Coded Transmitted Signal (1994)
- Security System With Two Signal Reporting (1997)
- Home Automation And Security System Controller (1997)
- Controllable Still Frame Video Transmission System (1997)
- Programmable Temperature Sensor For Security System (1998)
- Suspended Code For Alarm System (1998)
- Biometric Input Device For Security System (1998)
- Dual Mode Panel (1999)
- Alarm System Using Local Data Channel (1999)
- Alarm System With Programmable Device Control (2000)
- Security Alarm Keypad With Message Alert (2000)
- Remote Recovery Arrangement For Alarm System (2000)
- Security Alarm Keypad With Message Alert (2000)
- Remote Recovery Arrangement For Alarm System (2000)
- Alarm System With Programmable Device Control (2000)
- Integrated Lightning Detector (2003)
- False Alarm Reduction Method And System (2005)
- Security Device With Built-In Intercommunicated False Alarm Reduction Control (2005)
- Integrated Detecting Processor (2005)
- Energy Signal Detection Device Containing Integrated Detecting Processor (2005)
- Process And System Of Energy Signal Detection (2006)
- Process And System Of Power Saving Lighting (2007)
- Process And System Of Energy Signal Detection (2008)
- Single MCU-Based Motion Detection, Local Alarm And Supervisory Arrangement For Alarm System (2008)

For more information please click "Patent Summary – James Parker" or refer to page 7 of this document.

James Parker

Expert Witness / Technical Consultant Experience (www.parsec.ca)

1) Honeywell International Inc. v. 2GIG Technologies, Inc. et al			
2-09-cv-05156	U.S. District Court	Eastern District of New York (Central Islip)	
Patent Infringement	Date Filed: 11/24/2009	Terminated: 04/07/2011	
Pla.	Honeywell International Inc.	Rep. by	Kirkland & Ellis LLP
✓**Def.**	**2GIG Technologies, Inc.**	**Rep. by**	**Weil, Gotshal & Manges LLP**
Retained by 2GIG (via Weil, Gotshal & Manges). Honeywell sued 2GIG for patent infringement. As an "named inventor" on a prior art patent, I was sought out by WGM. Worked with WGM legal team to generate extensive Expert Report, subsequent amendments and responses. Provided various additional support based on my history and experience. Prepared and trained for Deposition by WGM. Case settled before trial.			

2) Honeywell International, Inc. v. Nest Labs, Inc. et al			
0:12-cv-00299	U.S. District Court	District of Minnesota (DMN)	
Patent Infringement	Date Filed: 02/06/2012	Stayed - Not Active	
Pla.	Honeywell International, Inc.	Rep. by	Faegre Baker Daniels LLP
✓**Def.**	**Nest Labs, Inc.**	**Rep. by**	**Fish & Richardson PC**
Honeywell is/was actively suing Nest Labs for patent infringement. Contacted by Fish and Richardson (Nest Labs Attorneys) and retained. Generated initial Expert Declaration in 2012 and then a follow up Expert Declaration in 2015. Provided support based on my history and experience. Case has been stayed while awaiting response from USPTO.			

3) Alarm.com Incorporated v. Telular Corporation			
1:13-cv-00890	U.S. District Court	District of Delaware (Wilmington)	
Patent Infringement	Date Filed: 05/20/2013	Terminated: 1/9/2014	
✓**Pla.**	**Alarm.com Incorporated**	**Rep. by**	**Cravath, Swaine & Moore LLP**
Def.	Telular Corporation	Rep. by	Wilson Sonsini Goodrich & Rosati PC
Retained by Cravath, Swaine & Moore, the attorneys for the Plaintiff, Alarm.com Incorporated. Performed preliminary review of the case material. Telular was at the time a major customer of iControl. When iControl launched their patent infringement case against Alarm.com (see #4 below), this Telular matter was put on the back burner. The time table of the iControl v. Alarm.com matter being much shorter than the Alarm.com v. Telular case. This case settled in conjunction with the iControl matter (immediately below).			

Continued…

4) iControl Networks, Inc. v. Alarm.com Incorporated et al			
1:13-cv-00834	U.S. District Court	Eastern District of Virginia - (Alexandria)	
Patent Infringement	Date Filed: 7/10/2013	Terminated: 1/9/2014	
Pla.	iControl Networks, Inc.	Rep. by	Kaufman & Canoles PC
✓**Def.**	**Alarm.com Incorporated**	**Rep. by**	**Cravath, Swaine & Moore LLP**

Retained (again) by Cravath, Swaine & Moore (see above #3), the attorneys for the Defendant Alarm.com Incorporated. Both parties (Alarm.com and iControl) sued each other for patent infringement involving a total of 11 patents. Prepared Expert Reports and related documents. Assisted in Rebuttal of other sides Expert Reports. Performed both infringement and invalidity analysis. Provided multiple possible Prior Art examples. All work done to a very accelerated timeframe. Required many late nights, even some through the night sessions with the Cravath team working to meet the deadlines. I was prepared and trained extensively for several weeks by the team of Cravath Attorneys for my Deposition (regarding my Expert Report). The case was settled literally hours before my scheduled Deposition time. Note… This was the second time I was fully prepared for Deposition only to have the cases settled before I could be deposed. The other time being item #1 above.

5) Script Security Solutions, LLC v. AT&T Digital Life, Inc. et al			
2:15-cv-00370	U.S. District Court	Eastern District of Texas (Marshall)	
Patent Infringement	Date Filed: 3/13/2015	Terminated: 2/19/2016	
Pla.	Script Security Solutions LLC	Rep. by	Antonelli, Harrington & Thompson LLP
✓**Def.**	**AT&T Digital Life, Inc.**	**Rep. by**	**Duane Morris LLP**

Retained by the Defendants, AT&T Digital Life via the law firm of Duane Morris. Provided multiple examples of prior art. Generated several claim charts. Provided additional support as required. Case settled before trial.

James Parker

Industry Experience - Electronic Security Systems & Sensors
Electronics R&D – New Product Development

President at EE-Systems Group Inc. Canada (R&D)

www.eesgi.com

August 2004 - Present

Co-founded EE Systems Group Inc. in both Canada (for R&D) and the United States (Operations). Oversight for new product and business development. Full management and executive responsibility. Developed multiple new technologies and intellectual property. Multiple United States, Canadian, Chinese and International patents developed, filed and/or granted. Defined and negotiated major corporate contracts with several organizations. Numerous new products developed and introduced to production. Developed and licensed our "ePIR" software to several multinational companies including Zilog, now part of IXYS for passive infrared motion detection (marketed under the name "ZMOTION"). The ePIR / ZMOTION solution provides for Intrusion as well as occupancy detection. eFAR100 False Alarm Reduction module developed using embedded Z8 MCU technology with firmware written in assembler (machine code). Full scalable suite of technology developed for solar powered, motion controlled, LED illumination from patio to parking lot sizes.

Vice President of Engineering at Tyco Security Products

(Note: DSC was acquired by Tyco Security Products in December 2001 - See Below)

www.tycosecurityproducts.com

March 1985 - December 2003 (~19 years)

Head of 200+ member engineering department composed of engineers, scientists, technologists and technicians. Responsible for all of DSC's research and product development efforts. Senior member of the DSC executive team setting strategic direction for the company. Cross functional responsibilities in Marketing, New Business Development and Manufacturing. Development of policies, procedures and practices. Financial planning and budget generation. Administration of corporate patent investigation, generation and infringement avoidance. Key vendor relationship building and negotiations. Major customer presentations and interaction. Principally involved in several corporate initiatives such as Six Sigma and ISO900X (quality programs), Speed to market, Ethics training, Customer training, Major cost reductions, etc.

Director of Engineering at Digital Security Controls (DSC) Limited

www.dsc.com

March 1985 - December 2003 (~19 years)

DSC began in 1979 as a basement operation supplying alarm control panels to the Canadian market. Joined DSC shortly after the founder, moved the operation out of his basement and into a small industrial unit. Staff consisted of the founder, three assembly workers and myself. Brought to DSC, microcontroller and other advanced technologies. Experienced extraordinarily

successful career that saw DSC expand to become one of the three largest companies in its marketplace with worldwide sales in over 120 countries. Growth fueled by optimum combination of product feature set, cost and quality. DSC was acquired by TYCO in December of 2001 for approximately $400 million dollars.

Vice President of Engineering at Swinemaster Inc.
June 1984 – March 1985

In charge of a small R&D team that developed and built several working prototypes of an automated baby pig feeder. The multipart component design of the baby pig feeder utilized several (up to 10) Zilog Z8 Microcontroller Units (MCU's) with the software written in assembly language (machine code).

Technical Sales Representative at Har-Tech Electronics Ltd.
January 1984 – June 1984

Provided sales and technical support to customers (and potential customers) of electronics manufacturers represented by Har-Tech Electronics Limited in the greater Toronto area (GTA).

Engineering Technologist at Thermetic Controls Limited
January 1983 – December 1983

Designed and implemented production test equipment for baseboard heater safety limit switches. Also designed and built working prototype of a digital setback thermostat for controlling electric baseboard heaters.

Publications

The Greek Philosopher Plato and …. False Alarms
National Burglar and Fire Alarm Association (NBFAA) June 6, 2005

Education

RCC Institute of Technology
Toronto, Ontario, Canada
1980 – 1982

Electronic Engineering Technology

James Parker

Summary of Patents – James Parker as a Named Inventor

1) Wireless Alarm System

Priority Date
December 16, 1993

US5625338A, CA2111929A1, CA2111929C, WO9516980A1, AU1104095A, EP0734560B1, 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
July 21, 1994

US5517518A, CA2128587A1, AU2508195A, AU692260B2

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 t 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
April 22, 1997

US5956388A, CA2203323A1, CA2203323C, WO9848564A1, AU7022598A

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
April 24, 1997

CA2203591A1, WO9849663A1, EP0978111A1, EP0978111B1, AT209385T, PT978111E, 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
August 25, 1997

US6642954B1, CA2301858C, CA2301858A1, WO9911069A1, AU4006797A, EP1010328A1, 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
April 23, 1998

US6215405B1, CA2235654C, CA2235654A1, WO9956261A1, AU3402099A, EP1074009B1, 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
September 17, 1998

US6078254A, CA2247600C, CA2247600A1

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
December 21, 1998

CA2256809A1, CA2256809C, WO0038118A1, AU1764500A

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
January 5, 1999

US6380850B1, CA2258817A1, CA2258817C, WO0041152A1, AU1765100A, EP1149370B1, 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
February 2, 1999

US6252504B1, US6895082B2, US2002029147A1, CA2260680A1, CA2260680C

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
March 10, 2000

CA2300465A1

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
March 10, 2000

CA2300468C, CA2300468A1

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. Preferrably, 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
March 10, 2000

CA2300648A1

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 preferrably 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
June 7, 2006

US7546223B2, US2007288108A1, EP2035992A2, EP2035992A4, 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
August 9, 2007

US8194061B2, US2009039797A1

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
April 11, 2008

US20080218361, WO2009126300A2, WO2009126300A3, EP2271967A4, EP2271967A2

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
November 25, 2008

US8410923B2, US2010219949A1

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.