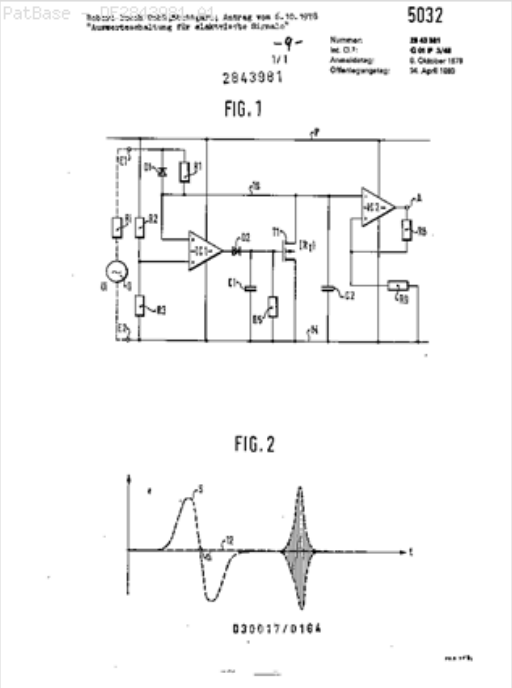
1) Family number: 1749031 (DE2843981A1)

Title: EVALUATION CIRCUIT FOR VARYING-AMPLITUDE, PULSED ELECTRICAL SIGNALS - CONTAINS REGULATING-CIRCUIT MAINTAINING CONSTANT SIGNAL AMPLITUDE SERVING AS REFERENCE FOR COMPARATOR TRIGGERING AT SET LEVEL

Abstract: An evaluation circuit for pulsed signals produced by an inductive leakage field generator e.g. for measurement of combustion engine crankshaft revolution rate, whose amplitude can vary between 0 and 100 volts, contains a circuit regulating the amplitude to a predefined value. The generator signal (E1) drives the non-inverting input of an operational amplifier (IC1) via a diode (D1) and parallel resistor (R1). The amplifier inverting input is connected to a fixed reference voltage defining the signal amplitude and determined by a potential divider resistor pair (R2, R3) connected across the supply raisl (P, M). The amplifier drives a transistor (T1) forming a variable impedance (RT) via a timer circuit (R5, C1). The variable impedance (RT) and the input resistor (R1) form a generator voltage divider driving a comparator (IC2) inverting input. The comparator output is fed to its non-inverting input via a voltage divider (R8, R9). It triggers at a fixed threshold level.

Classifications:
International (IPC 8-9): G01P3/46 G01P3/481 (Advanced/Invention); G01P3/42 (Core/Invention)
International (IPC 1-7): G01P3/48 G05B1/01
CPC: G01P3/46 G01P3/481
European: G01P3/46 G01P3/481



Family:

Publication number	Publication date	Application number	Application date
DE2843981 A1	19800424	DE19782843981	19781009
DE2843981 C2	19850808	DE19782843981	19781009

Priority:
DE19782843981 19781009

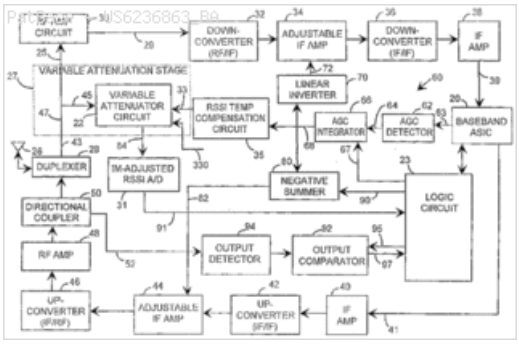
Probable Assignee: BOSCH GMBH ROBERT
Assignee(s): (std): BOSCH GMBH ROBERT
Assignee(s): ROBERT BOSCH GMBH
Inventor(s): (std): JEENICKE EDMUND ; KRAUTER IMMANUEL DIPL ING
Inventor(s): KRAUTER IMMANUEL DIPL ING 7151 ERBSTETTEN DE ; JEENICKE EDMUND 7141 SCHWIEBERDINGEN DE

2) Family number: 15423092 (US6236863B)

Title: COMPREHENSIVE TRANSMITTER POWER CONTROL SYSTEM FOR RADIO TELEPHONES

Abstract: An output power control system prevents saturation by limiting total output power and maintaining closed loop responsiveness for a radio telephone having closed loop and open loop gain control systems. The output power control system determines when total output power exceeds an output power trigger level and automatically enters a saturation prevention mode whereby total output power is reduced through modification of a closed loop power control register. In one embodiment, an output detector and an output comparator continuously monitor output power, and in another embodiment, an analog-to-digital converter samples output power levels. Saturation prevention processes of various preferred embodiments include, through continual monitoring, edge-triggered interrupt servicing, and level-triggered interrupt servicing, subsequently modifying the closed loop power control register to decrease the closed loop output power control portion of the total output power until the output power falls below the output trigger level. A saturation prevention method of yet another embodiment includes maintaining the closed loop power control register at a constant level unless a decrease in received signal strength is detected, in which case the closed loop power control register is modified to compensate for an increased open loop component of the total output power.

Classifications:
International (IPC 8-9): H03F1/30 H03G3/20 H03G3/30 H04B1/04 H04B7/005 (Advanced/Invention);
H03F1/30 H03G3/20 H03G3/30 H04B1/04 H04B7/005 (Core/Invention)
International (IPC 1-7): H04B1/38
CPC: H04W52/08 H03F1/30 H03G3/3052 H03G3/3078 H04B1/04 H04B2001/0416 H04W52/10 H04W52/52
European: H03F1/30 H03G3/30E H03G3/30E5 H04B1/04 H04W52/08 H04W52/10 H04W52/52 T04B1/04A1
US: 455/126 455/522 455/63 455/63.1



Family:

Publication number	Publication date	Application number	Application date
US6236863 BA	20010522	US19980042759	19980317

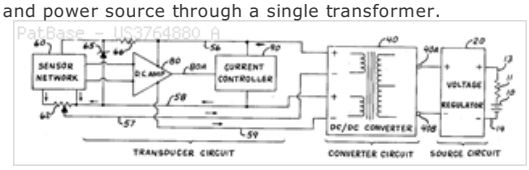
Priority:
US19970072101P 19970331 US19980042759 19980317

Probable Assignee: CANON INC
Assignee(s): (std): OKI TELECOM INC
Assignee(s): CANON INC ; CANON KK
Inventor(s): (std): BAIN RICHARD I ; LYALL JR ROBERT L ; WALDROUP ANTHONY B
Inventor(s): ANTHONY B WALDROUP ; RICHARD I BAIN ; ROBERT L LYALL JR
Agent(s): THOMAS KAYDEN HORSTEMEYER AND RISLEY LLP

3) Family number: 1355139 (US3764880A)

Title: TWO-WIRE CURRENT TRANSMITTER WITH ISOLATED TRANSDUCER CIRCUIT

Abstract: A two-wire current transmitter for controlling total current in the two wires in accordance with a sensor value and which provides for isolation of the transducer circuitry from the load and power source through a single transformer.
Classifications:
International (IPC 8-9): G01K1/02 G01K7/02 G08C19/02 (Advanced/Invention);
G01K1/00 G01K7/02 G08C19/02 (Core/Invention)
International (IPC 1-7): G01D5/12 G01D5/14 G01K7/02 G01R15/00 G01R17/06 G01R19/00 G08C19/02 H02J1/06
CPC: G01K1/024 G01K7/021 G08C19/02
European: G01K1/02C G01K7/02C G08C19/02
US: 363/22 363/74 374/183 374/E01.004 374/E07.016 374/E1.004 374/E7.016



Family:

Publication number	Publication date	Application number	Application date
BR7303294 A0	19740711	BR19730003294	19730507
CA982654 A1	19760127	CA19730168401	19730410
DE2321900 A1	19731122	DE19732321900	19730430
DE2321900 B2	19770217	DE19732321900	19730430
FR2183860 A1	19731221	FR19730016307	19730507
FR2183860 B1	19770211	FR19730016307	19730507
GB1423263 A	19760204	GB19730018808	19730418
JP1412031 C3	19871127	JP19730043285	19730418
JP49029157 A2	19740315	JP19730043285	19730418
JP60013237 B4	19850405	JP19730043285	19730418
US3764880 A	19731009	US19720250882	19720508

Priority:
US19720250882 19720508

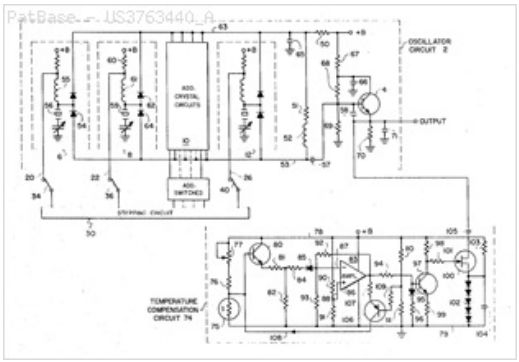
Probable Assignee: ROSEMOUNT INC
Assignee(s): (std): ROSEMOUNT INC
Assignee(s): ROSEMOUNT INC EDEN PRAIRIE MINN V ST A ; ROSEMOUNT INC US ; ROSE ROBERT C
Inventor(s): (std): ROSE ROBERT C ; ROSE R
Inventor(s): ROSE R US ; ROBAATO SHII ROOZU ; ROSE ROBERT C MINNEAPOLIS MINN V ST A

4) Family number: 4162145 (US3763440A)

Title: TEMPERATURE COMPENSATED SIGNAL GENERATION CIRCUIT EMPLOYING A SINGLE TEMPERATURE SENSING ELEMENT

Abstract: A signal generation circuit includes a crystal oscillator for generating an oscillatory signal and a temperature compensation circuit coupled to the oscillator for controlling the capacitance loading of the crystal in the oscillator. The temperature compensation circuit includes a temperature sensing device and operates to develop a first capacitance in a first temperature range, a second capacitance which varies at a certain rate with the variation in temperature in a second temperature range, and a third capacitance which varies at a different rate with the variation in temperature in a third temperature range.
Classifications:
International (IPC 8-9): H03B5/32 H03B5/36 H03L1/02 (Advanced/Invention);

H03B1/00 (Advanced/Non-invention)
International (IPC 1-7): H03B3/04 H03B5/04 H03B5/36
CPC: H03B5/368 H03B2200/0048 H03B2200/0056 H03B2201/018 H03B2201/0258 H03L1/022
European: H03B5/36C1 H03L1/02B T03B200/00C12 T03B200/00C8 T03B201/01D T03B201/02D1
US: 331/116R 331/161 331/176 331/6.6 331/66



Family:

Publication number	Publication date	Application number	Application date
DE2320656 A1	19731108	DE19732320656	19730424
JP49055261 A2	19740529	JP19730046594	19730424
US3763440 A	19731002	US19720246627	19720424

Priority:

US19720246627 19720424

Probable Assignee: INTEGRATED SYSTEMS TECHNOLOGY

Assignee(s): (std): INTEGRATED SYSTEMS TECHNOLOGY

Assignee(s): INTEGRATED SYSTEMS TECHNOLOGY INC ; INTEGRATED SYSTEMS TECHNOLOGY INC GARLAND TEX V S ; INTEGRATED SYSTEMS TECHNOLOGY INC GARLAND TEX V ST A ; INTEGRATED SYSTEMS TECHNOLOGY INC US

Inventor(s): (std): GARCIA HERNANDO JAVIER ; PEEK BENJAMIN R ; PEEK B ; GARCIA H

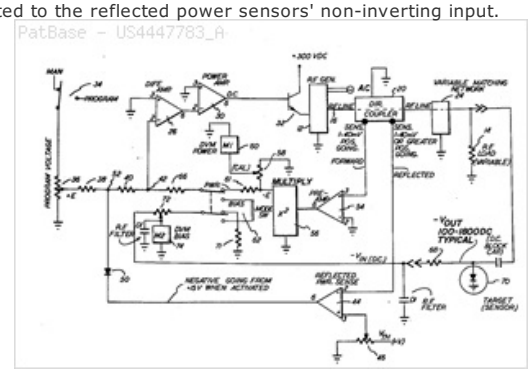
Inventor(s): PEEK B US ; GARCIA H US ; GARCIA HERNANDO JAVIER SAN FRANCISCO CALIF ; PEEK BENJAMIN R GARLAND TEX V ST A

5) Family number: 4349225 (US4447783A)

Title: Programmable RF power regulator (stabilizer)

Abstract: Disclosed is a regulator circuitry (stabilizer) for controlling the output of an RF generator according to a programmable input signal. A power stage is responsive to the selected value of the programmable input signal to drive the RF generator at the desired power level. A forward power feedback control circuit monitors and controls the power output stage so that the desired RF output level is maintained at a constant level. In this particular mode of operation, RF output power is maintained constant and therefore independent of variations in gain due to temperature changes and other parameters which could effect the overall transfer function of said generator (and including mismatch of the generator into the load). When the stabilizer is selectively placed in a second operational mode, namely bias regulation, a different parameter, target bias voltage, is maintained at a constant level, independent of variations in the generator's transfer function such as gain changes due to temperature and so forth as mentioned above. A reflected power control feedback circuit limits the reflected power to a predetermined signal level and is arranged to reduce the signal applied to the power output stage to reduce the forward power whenever the reflected power exceeds the selected fixed level although the forward power will not be reduced below a level sufficient to support some reflected power. Forward power will never be reduced below the level required to support and maintain the reflected power level at the magnitude representing the reference voltage selected by the adjustment potentiometer connected to the reflected power sensors' non-inverting input.

Classifications:
International (IPC 8-9): H02J3/00 H03L5/02 (Advanced/Invention); H02J3/00 H03L5/00 (Core/Invention)
International (IPC 1-7): H02J3/00 H04B1/04
CPC: H03L5/02
European: H03L5/02
US: 323/275 323/280 330/207P 455/115 455/115.3 455/117



Family:

Publication number	Publication date	Application number	Application date
JP59010133 A2	19840119	JP19830086001	19830518
US4447783 A	19840508	US19820379696	19820519

Priority:

US19820379696 19820519

Probable Assignee: PERKIN ELMER CORP

Assignee(s): (std): PERKIN ELMER CORP

Assignee(s): PERKIN ELMER CORP THE ; PERKIN ELMER MAIN AVENUE NORWALK CT 06856 A CORP O ; THE PERKIN ELMER CORP

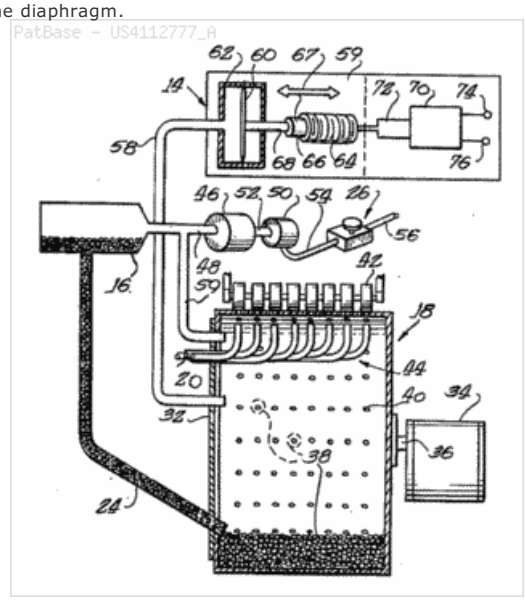
Inventor(s): (std): QUICK DONALD L ; DONARUDO ERU KUITSUKU

6) Family number: 6946341 (US4112777A)

Title: AIR PRESSURE MONITOR

Abstract: An air pressure monitor includes an electro-mechanical sensor comprising a flexible diaphragm whose deflection is proportional to the air pressure applied thereto, and a variable inductor including a coil and a movable core inside of the coil, the movable core being attached to the flexible diaphragm for movement in response to the deflection thereof to adjust the inductance of the coil in proportion to the air pressure applied to the diaphragm. The monitor further comprises electrical circuits including a first oscillator circuit including the coil for producing a pressure signal at a frequency proportional to the pressure in response to the inductance of the coil, and a second oscillator circuit for producing a reference signal at a frequency corresponding to the frequency produced by the first oscillator when the pressure is substantially zero. Mixer and filter circuits are provided, connected to the two oscillator circuits for providing a signal whose frequency is proportional to the difference in frequencies between the pressure and reference signals and a Schmitt trigger and divider are connected in series from the filter circuit for producing a chain of digital pulses at a frequency proportional to that of the difference signal. An adjustable gate generator is provided for producing a gate signal having a predetermined period, such that the number of digital pulses produced at the output of the divider during the predetermined period comprises a digital signal corresponding to a measurement in predetermined, fixed units of the pressure at the diaphragm.

Classifications:
International (IPC 8-9): A01C7/04 G01L9/00 G01L9/10 (Advanced/Invention); A01C7/00 G01L9/00 G01L9/10 (Core/Invention)
International (IPC 1-7): G01L9/10
CPC: A01C7/044 G01L9/007 G01L9/105
European: A01C7/04B1 G01L9/00D4 G01L9/10
US: 73/714 73/728



Family:

Publication number	Publication date	Application number	Application date
US4112777 A	19780912	US19770808807	19770630

Priority:
US19770808807 19770630

Probable Assignee: DICKEY JOHN CORP

Assignee(s): (std): DICKEY JOHN CORP

Assignee(s): FIRST BANK NATIONAL ASSOCIATION ; FLEET CREDIT A CORP OF RI CORP ; FLEET CREDIT CORP ; US BANK NATIONAL ASSOCIATION F K A FIRST BANK NATI ; US BANK NATIONAL ASSOCIATION F K A FIRST BANK NATIONAL ASSOCIATION

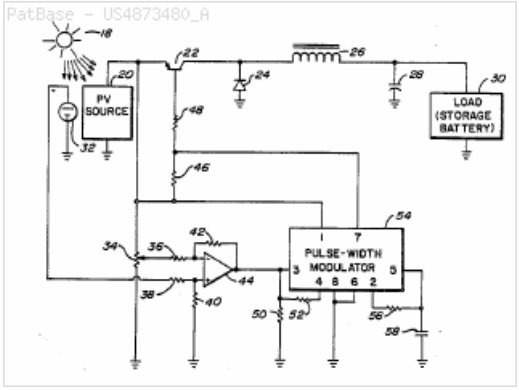
Inventor(s): (std): KNEPLER JOHN T

7) Family number: 3206365 (US4873480A)

Title: COUPLING NETWORK FOR IMPROVING CONVERSION EFFICIENCY OF PHOTOVOLTAIC POWER SOURCE

Abstract: A switching network for improving the conversion efficiency of a photovoltaic power supply comprises a variable coupling circuit for coupling an array of photovoltaic cells to a load resistance. The combined effective impedance of the network and load is varied to match the value required for maximum output power. A switching transistor (22) which connects the source module (20) to the load (30) is pulse-width modulated with a variable duty cycle determined by the control signal from the sensor circuit. A photovoltaic cell (32) similar to those comprising the photovoltaic power module (20) is used to track variations in the ambient light intensity. The open-circuit voltage of a sensor cell (32) is used to determine the proper value of duty cycle required for maximum power transfer. The output voltage of the module (20) is sampled and compared with the proper value to produce a control signal.

Classifications:
International (IPC 8-9): G05F1/67 (Advanced/Invention); G05F1/66 (Core/Invention)
International (IPC 1-7): G05F5/00
CPC: Y10S136/293 Y10S323/906 G05F1/67 Y02E10/58
European: G05F1/67 Y02E10/58
US: 136/293 323/229 323/299 323/906



Family:

Publication number	Publication date	Application number	Application date
US4873480 A	19891010	US19880227698	19880803

Priority:

US19880227698 19880803

Probable Assignee: LAFFERTY DONALD L

Assignee(s): (std)**:** LAFFERTY DONALD L

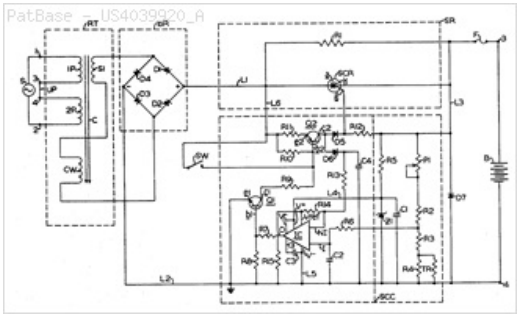
Inventor(s): (std)**:** LAFFERTY DONALD L

8) Family number: 1401379 (US4039920A)

Title: CYCLING TYPE OF ELECTRONIC BATTERY CHARGER

Abstract: This disclosure relates to a cycling type of a constant current electronically controlled battery charger having a reactive transformer, a full-wave rectifier, a series regulator and a sensing and control circuit for alternately supplying a low and high charging rate to a rechargeable battery whereby the battery is constantly "worked" in order to prevent accelerated deterioration of the battery.

Classifications:
International (IPC 8-9): H02J7/00 H02J7/02 H02J7/04 (Advanced/Invention); H02J7/00 H02J7/02 H02J7/04 (Core/Invention)
International (IPC 1-7): H02J7/04
CPC: H02J7/008 H02J7/022 Y10S320/28 Y10S320/29
European: H02J7/00M10C3 H02J7/02B
US: 320/146 320/22 320/DIG.28 320/DIG.29



Family:

Publication number	Publication date	Application number	Application date
CA1022230 A1	19771206	CA19740210533	19741001
US4039920 A	19770802	US19750548422	19750210

Priority:

US19730411371 19731031 US19750548422 19750210

Probable Assignee: AMERICAN STANDARD INC A DE CORP

Assignee(s): (std)**:** WESTINGHOUSE AIR BRAKE CO

Assignee(s): WESTINGHOUSE AIR BRAKE COMPANY ; AMERICAN STANDARD INC ; AMERICAN STANDARD INC A DE CORP ; POPP RALPH ; UNION SWITCH AND SIGNAL INC ; UNION SWITCH AND SIGNAL INC 5800 CORPORATE DRIVE PITTSBURGH PA 15237 A CORP OF DE

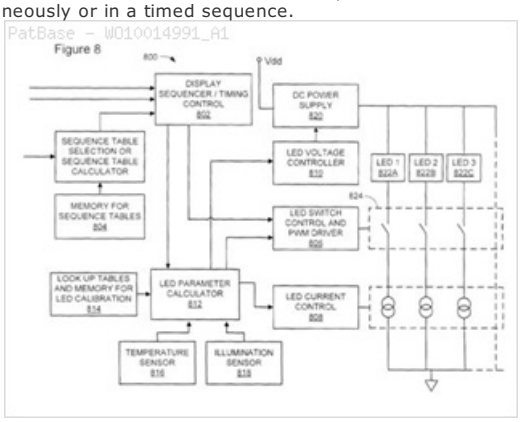
Inventor(s): (std)**:** POPP RALPH

9) Family number: 44325411 (WO10014991A1)

Title: CIRCUITS FOR CONTROL OF LIGHT SOURCES IN DISPLAYS

Abstract: The systems and methods described herein relate to electronic circuits and methods for control of light sources in displays. The circuit includes a plurality of light sources, for instance light emitting diodes, connected to a common power supply. An illumination control system regulates current to the light sources in coordination with a field sequential color imaging algorithm. The light sources can be illuminated either simultaneously or in a timed sequence.

Classifications:
International (IPC 8-9): G09G3/20 G09G3/34 (Advanced/Invention)
CPC: G09G3/20 G09G3/3406 G09G2320/0295 G09G2320/041 G09G2330/02 G09G2360/144
European: G09G3/20 G09G3/34B S09G320/02S2 S09G320/04B S09G330/02 S09G360/14E



Family:

Publication number	Publication date	Application number	Application date
WO10014991 A1	20100204	WO2009US52590	20090803

Priority:

US20080137711P 20080801

Probable Assignee: PIXTRONIX INC

Assignee(s): (std)**:** LEWIS STEPHEN R ; MCALLISTER ABRAHAM ; PIXTRONIX INC ; VUADENS FRANCOIS

Inventor(s): (std): LEWIS STEPHEN R ; MCALLISTER ABRAHAM ; VUADENS FRANCOIS

Agent(s): KELLY EDWARD J ET AL

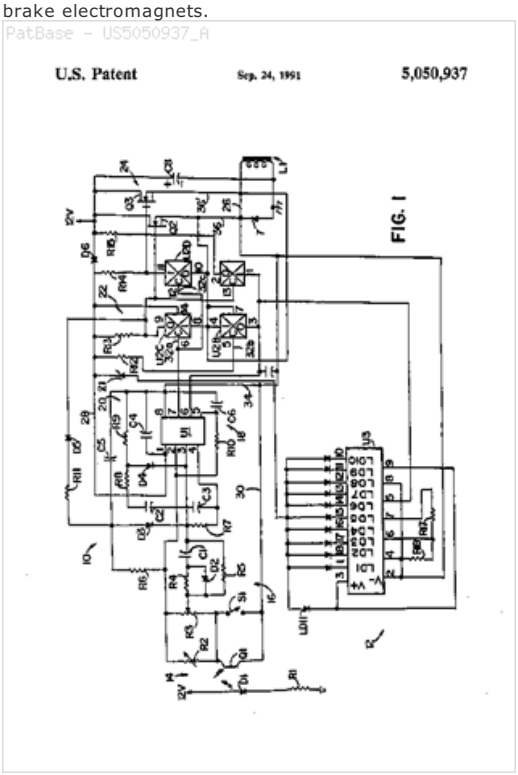
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

10) Family number: 10758446 (US5050937A)

Title: CONTROLLER FOR ELECTRIC BRAKING SYSTEMS

Abstract: The specification relates to electronic controllers for braking systems, such as those used to actuate the brakes on towed vehicles in response to commands from the towing vehicle. The controller is responsive to an inertial sensor and/or manual control, and is completely independent of the towing vehicle brake light circuit. The controller includes a constant frequency variable pulse-width modulator which interacts with the towed vehicle braking system through a power MOSFET switch, which is preferably of N-channel configuration, that comprises the control element for the braking current supplied to the electromagnets that actuate the towed vehicle brakes. The controller advantageously includes a dual-slope integrator which provides a comparatively slow and gradually increasing control voltage to the variable pulse-width modulator, but discharges comparatively quickly to insure fast brake disengagement, in response to the inertial sensor or manual control. The controller preferably senses the voltage drop across the power MOSFET during conduction thereof to generate a control voltage input to the pulse-width modulator as well as a display circuit. The display circuit may include an LED bar graph which provides an indication of the magnitude of the current supplied to the brake electromagnets.

Classifications:
International (IPC 8-9): B60T13/66 B60T13/74 B60T17/22 B60T7/20 (Advanced/Invention);
B60T13/00 B60T13/66 B60T17/18 B60T7/20 (Core/Invention)
International (IPC 1-7): B60T13/72 B60T13/74 B60T8/00 B60T8/16
CPC: B60T7/20 B60T13/66 B60T13/74 B60T17/22
European: B60T13/66 B60T13/74 B60T17/22 B60T7/20
US: 188/1.11 188/1.11E 188/1.11R 303/20 303/24.1 303/7



Family:

Publication number	Publication date	Application number	Application date
AU199060066 A1	19910207	AU19900060066	19900801
AU635950 B2	19930408	AU19900060066	19900801
CA2022479 AA	19910208	CA19902022479	19900801
CA2022479 C	19950718	CA19902022479	19900801
EP0412786 A2	19910213	EP19900308701	19900807
EP0412786 A3	19940316	EP19900308701	19900807
US5050937 A	19910924	US19890390617	19890807
US5149176 A	19920922	US19900563505	19900807
US5352028 A	19941004	US19910807115	19911213
US5741048 A	19980421	US19940350499	19941206

Priority:

US19890390617 19890807 CA19902022479 19900801 US19900563505 19900807
US19910807115 19911213 US19920877323 19920430 US19930129799 19930930
US19940218837 19940328 US19940350499 19941206

Probable Assignee: TEKONSHA TOWING SYSTEMS INC

Assignee(s): (std): TEKONSHA ENGINEERING CO

Assignee(s): BANK OF AMERICA NA AGENT AS ; BANK OF NEW YORK MELLON TRUST CO NA SECOND LIEN AG ; BANK OF NEW YORK MELLON TRUST CO NA SECOND LIEN AGENT AS ; CEQUENT ELECTRICAL PRODUCTS INC ; ERS LLC ; HELLER FINANCIAL INC ; HELLER FINANCIAL INC AGENT AS ; JPMORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA COLLATERAL AGENT AS ; TEKONSHA ENGINEERING CO A OF MI CORP ; TEKONSHA ENGINEERING COMPANY ; TEKONSHA TOWING SYSTEMS INC ; WESBAR CORP ; TRIMAS INT HOLDINGS LLC ; TRIMAS CORP ; TRIMAS CO LLC ; TOWING HOLDING LLC ; RIEKE OF MEXICO INC ; RIEKE OF INDIANA INC ; RIEKE LEASING CO INC ; RIEKE CORP ; RICHARDS MICRO TOOL INC ; RESKA SPLINE PRODUCTS INC ; REESE PRODUCTS INC ; PLASTIC FORM INC ; NORRIS IND INC ; NORRIS ENVIRONMENTAL SERVICES INC ; NORRIS CYLINDER CO ; NI WEST INC ; NI IND INC ; NETCONG INVESTMENTS INC ; MONOGRAM AEROSPACE FASTENERS INC ; LOUISIANA HOSE AND RUBBER CO ; LAMONS METAL GASKET CO ; LAMONS GASKET CO ; LAKE ERIE PRODUCTS CORP ;

KEO CUTTERS INC ; INDUSTRIAL BOLT AND GASKET INC ; HI VOL PRODUCTS LLC ; HAMMERBLOW CO LLC ; HAMMERBLOW ACQUISITION CORP ; FULTON PERFORMANCE PRODUCTS INC ; ENTEGRA FASTENER CORP ; ECCLESTON LARRY ; DRAW TITE INC ; DI RITE CO ; DEW TECHNOLOGIES INC ; CUYAM CORP ; CONSUMER PRODUCTS INC ; COMPAC CORP ; CEQUENT TOWING PRODUCTS INC ; CEQUENT PERFORMANCE PRODUCTS INC ; CEQUENT CONSUMER PRODUCTS INC ; BEAUMONT BOLT AND GASKET INC ; ARROW ENGINE CO

Inventor(s): (std): ECCLESTON LARRY

Inventor(s): LARRY ECCLESTON

Agent(s): GRIFFITH HACK; BORDEN LADNER GERVAIS LLP

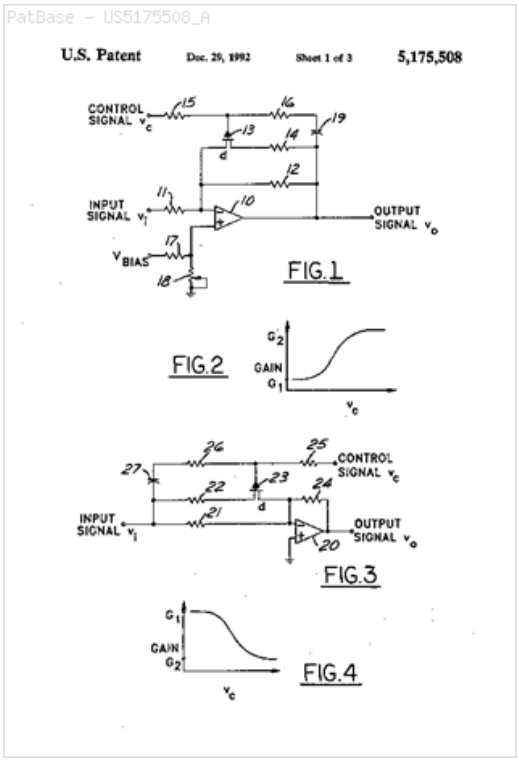
Designated states: BE DE GB

11) Family number: 8933465 (US5175508A)

Title: Voltage-controlled amplifier using operational amplifier

Abstract: A voltage-controlled amplifier employs an operational amplifier (10) with negative feedback for setting the gain. A voltage variable resistance such as a junction-field-effect transistor (JFET) (13) is employed as part of a variable voltage divider for controlling the amplifier gain. Resistors (12,14) in series and in parallel with the JFET detemine minimum and maximum resistances corresponding to upper and lower limits for the amplifier gain. Thus, multiple channels of an amplifier (10) can be provided with closely matched characteristics even using separate JFETs in each separate channel which have unmatched characteristics.

Classifications:
International (IPC 8-9): H03G1/00 H03G11/00 (Advanced/Invention); H03G1/00 H03G11/00 (Core/Invention)
International (IPC 1-7): H03F3/08 H03G1/00 H03G1/04 H03G3/20 H04S7/00
CPC: H03G1/007 H03G11/00
European: H03G1/00B6F H03G11/00
US: 330/282 330/295 330/84 330/86



Family:

Publication number	Publication date	Application number	Application date
DE69223219 D1	19980102	DE19926023219	19921022
DE69223219 T2	19980326	DE19926023219T	19921022
EP0545536 A1	19930609	EP19920309665	19921022
EP0545536 B1	19971119	EP19920309665	19921022
US5175508 A	19921229	US19910802686	19911205

Priority:

US19910802686 19911205

Probable Assignee: VISTEON GLOBAL TECHNOLOGIES INC

Assignee(s): (std): FORD FRANCE ; FORD MOTOR CO ; FORD WERKE AG

Assignee(s): FORD WERKE AG 50735 KOELN DE ; FORD WERKE AKTIENGESELLSCHAFT ; VISTEON GLOBAL TECHNOLOGIES INC ; FORD MOTOR COMPANY ; FORD MOTOR COMPANY LIMITED ; FORD FRANCE S A

Inventor(s): (std): BEHRENS MAX HENRY ; DIFIORE NICHOLAS LAWRENCE ; GINGRICH RANDAL ROSS ; GINGRICH RANDAL R ; DIFIORE NICHOLAS L ; BEHRENS MAX H

Inventor(s): GINGRICH RANDAL ROSS BELLEVILLE MICHIGAN 48111 US ; DIFIORE NICHOLAS LAWRENCE FARMINGTON HILLS MICHIGA ; DIFIORE NICHOLAS LAWRENCE FARMINGTON HILLS... ; BEHRENS MAX HENRY PLYMOUTH MICHIGAN 48170 US

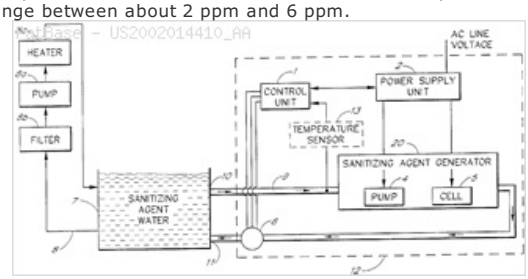
Designated states: DE FR GB

12) Family number: 28176526 (US2002014410A)

Title: AMPEROMETRIC SENSOR PROBE FOR AN AUTOMATIC HALOGEN CONTROL SYSTEM

Abstract: An amperometric bromine control system accurately maintains a desired concentration of bromine within a home spa or in other water features. The control system employs amperometric sensing to measure the bromine concentration in

the spa water and uses this measurement to control the electrochemical production of bromine through the oxidation of aqueous bromide. The level of bromide in the spa water desirably is greater than 50 ppm in order to obtain a linear relationship between the current level sensed through the amperometric measurement and the concentration level of bromine in the water. In this manner, the control system can accurately measure the bromine concentration in the spa water and precisely maintain the bromine concentration within a desired range between about 2 ppm and 6 ppm.



Classifications:
International (IPC 8-9): C02F1/00 C02F1/42 C02F1/461 C02F1/467 C02F1/72 C02F1/76 G01N27/44 G01N27/49 (Advanced/Invention); C02F1/42 C02F1/72 C02F1/76 (Advanced/Non-invention)
International (IPC 1-7): B01D21/30 C02F1/46 C02F1/461 C02F1/76 G01N27/26 G01N27/414
CPC: G01N27/4045 C02F1/008 C02F1/42 C02F1/46104 C02F1/4674 C02F1/72 C02F1/766 C02F2001/46119 C02F2001/46123 C02F2001/46128 C02F2103/023 C02F2103/42 C02F2201/4611 C02F2201/4612 C02F2201/46125 C02F2201/4617 C02F2209/006 C02F2209/06 C02F2303/04 G01N27/44 Y02W10/37
European: C02F1/00T C02F1/461B C02F1/467B2 G01N27/404B G01N27/44 M02F1/00T M02F1/42 M02F1/461B2D M02F1/461B2F M02F1/461B2H M02F1/467B2 M02F1/72 M02F1/76G M02F103/02B M02F103/42 M02F201/461B10D M02F201/461B2 M02F201/461B6 M02F201/461B6B M02F209/00T2 M02F209/06 M02F303/04
US: 134/1 204/412 204/555 205/743 205/778.5 210/143 210/167.11 210/169 210/192 210/243 210/746 210/754

Family:

Publication number	Publication date	Application number	Application date
AU199915201 A1	19990531	AU19990015201	19981106
AU749759 B2	20020704	AU19990015201	19981106
EP1045816 A2	20001025	EP19980959392	19981106
US2002014410 AA	20020207	US20010906225	20010716
US6238555 BA	20010529	US19980187241	19981106
US6270680 BA	20010807	US19980187623	19981106
WO9924369 A2	19990520	WO1998US23781	19981106
WO9924369 A3	19990910	WO1998US23781	19981106

Priority:

US19970064899P 19971107 US19980075276P 19980219 US19980187241 19981106
US19980187623 19981106 WO1998US23781 19981106 US20010906225 20010716

Probable Assignee: BALBOA WATER GROUP INC

Assignee(s): (std): BIOQUEST ; BIOQUEST LLC ; SILVERI MICHAEL A

Assignee(s): CALIC CABA ; DYMAS FUNDING CO LLC ; BMO HARRIS BANK NA ADMINISTRATIVE AGENT AS ; BIOQUEST SUITE ; WESTERN STATES INVESTMENT CORP ; DYMAS FUNDING CO ; PNC BANK NATIONAL ASSOCIATION ; BALBOA INSTRUMENTS INC ; BALBOA WATER GROUP INC

Inventor(s): (std): CALIC CABA ; MILOSAVLJEVIC EMIL ; SILVERI MICHAEL A

Inventor(s): MICHAEL A SILVERI ; CABA CALIC ; EMIL MILOSAVLJEVIC

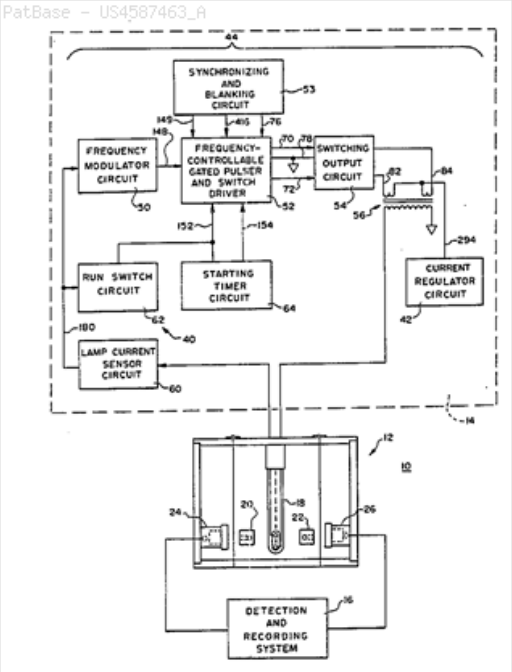
Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

13) Family number: 2087541 (US4587463A)

Title: ABSORBANCE MONITOR

Abstract: To provide a reliable start for cadmium and zinc lamps and reduce baseline noise in an absorbance monitor, voltage pulses are applied to the primary of a transformer followed by shutoff of the primary current which discharges the energy stored in the magnetizing inductance of the transformer as three thousand volt peaks in its secondary in a series of timed steps. At the end of the timed period, the system shuts down unless it has approached operating frequency. The frequency is controlled by the amount of current passing through a gas discharge lamp in circuit with the transformer secondary and the frequency controls the amplitude of the voltage spikes. After warm-up, blanking pulses prevent optical noise from electrical-path-change oscillations within the tube. In one embodiment, a constant current source controls the current and in another, an operating current and frequency are established by the transformer leakage inductance and lamp characteristics in the circuit.
Classifications:
International (IPC 8-9): G01N21/01 H05B41/00 H05B41/24 H05B41/292 H05B41/38 (Advanced/Invention); G01N21/01 H05B41/00 H05B41/24 H05B41/28 H05B41/38 (Core/Invention)
International (IPC 1-7): G01J3/10 G01N21/01 G01N21/59 G05F1/12 G05F3/04 H05B41/00 H05B41/18 H05B41/24 H05B41/29 H05B41/30 H05B41/36
CPC: Y10S315/07 H05B41/2925 H05B41/38
European: H05B41/292C4 H05B41/38
US: 315/279 315/282 315/287 315/307 315/DIG.7



Family:

Publication number	Publication date	Application number	Application date
DE3431705 A1	19850411	DE19843431705	19840829
DE3431705 C2	19880128	DE19843431705	19840829
GB2147162 A1	19850501	GB19840021509	19840824
GB2147162 B2	19880505	GB19840021509	19840824
GB2163015 A1	19860212	GB19850019619	19850805
GB2163015 B2	19880505	GB19850019619	19850805
GB8421509 A0	19840926	GB19840021509	19840824
GB8519619 A0	19850911	GB19850019619	19850805
JP2108265 C3	19961106	JP19840198394	19840921
JP60095333 A2	19850528	JP19840198394	19840921
JP8024074 B4	19960306	JP19840198394	19840921
US4587463 A	19860506	US19830534581	19830922
US4709190 A	19871124	US19850787753	19851015

Priority:

US19830534581 19830922 GB19840021509 19840824 US19850787753 19851015

Probable Assignee: ISCO INC

Assignee(s): (std): ISCO INC

Assignee(s): ISCO INC 4700 SUPERIOR ST LICOLN NB 68505 A NE CORP ; ISCO INC LINCOLN NEBR US ; ISUKO INC

Inventor(s): (std): ALLINGTON ROBERT WILLIAM ; ALLINGTON ROBERT W ; ROBAATO UIRIAMU AARINTON

Inventor(s): ROBERT WILLIAM ALLINGTON ; WILLIAM ALLINGTON ROBERT ; ALLINGTON ROBERT WILLIAM LINCOLN NEBR US ; ALLINGTON ROBERT WILLIAM LINCOLN NEBR

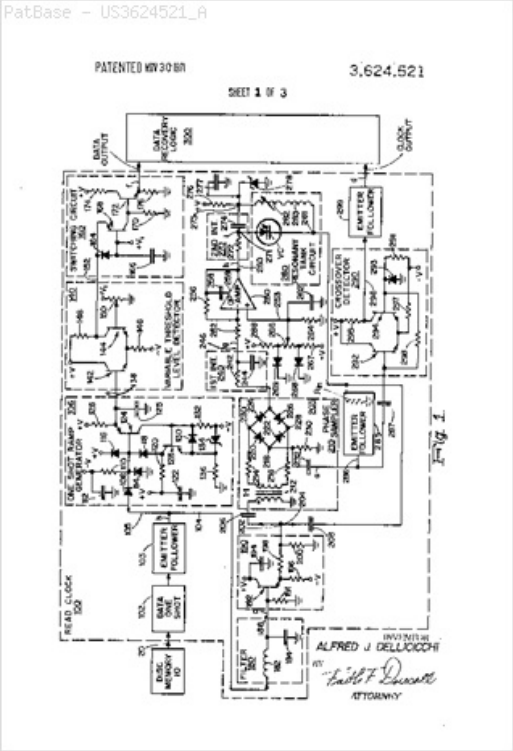
14) Family number: 497633 (US3624521A)

Title: SYNCHRONOUS READ CLOCK APPARATUS

Abstract: 1346854 Digital data readout HONEYWELL INFORMATION SYSTEMS Inc 25 May 1971 [19 June 1970] 16998/71 Heading G4C A digital data reading apparatus decodes an input data stream, e.g. in a self clocking code such as double frequency or phase encoding, to provide separate data and clock signal outputs. The apparatus receives a stream of data and sync. pulses from a magnetic disc 10 and uniform width pulses are produced by monostable 102 and emitter follower 103 to give waveform (b), Fig. 2. A ramp signal is generated for each of the pulses of the input data stream in unit 106 (waveform (e), Fig. 2) and the ramp signals pass to a variable threshold switching circuit 140. At the same time waveform (b) passes through a filter 180 which produces bell-shaped pulses (waveform (c)) which trigger an oscillator 280 (a resonant tank circuit) to produce a sinusoidal waveform (a). A crossover detector 290 generates clock output pulses (waveform (d)) from predetermined sets of crossover points of the waveform (a). By adjusting the threshold of the switching circuit 140 the pulses of the data stream (waveform (f)) are arranged to be in 180 degrees out of phase relationship with the clock waveform. A phase sampler 2, 10 has been comparing the time occurrence of the pulses of waveform (c) relative to the zero crossover points of waveform (a) for deriving an error voltage proportional to the phase difference therebetween. Using integrators 240, 270 a correction voltage is applied to the tank circuit 280 which adjusts its frequency at a critically damped rate to decrease the discrepancy in phase. The waveforms (f) and (d) pass to data recovery logic 300 (Figs. 3, not shown) where control signals are generated which define the intervals during which the data pulses of the input data stream are to be sampled for content (i.e. decoded into binary's 1's and 0's). In the absence of a predetermined number of pulses in the data stream the amplitude of the reference signal from the tank circuit reduces so as to inhibit production of the clock pulses.

Classifications:

International (IPC 8-9): G11B20/14 (Advanced/Invention);
G11B20/14 (Core/Invention)
International (IPC 1-7): G06F1/04 G06K1/00 G06K7/00 G11B5/00 G11B5/02 G11B5/09 H03K13/00 H03K13/01 H03K5/00 H03L7/08 H04B1/30 H04L7/02
CPC: G11B20/1419
European: G11B20/14A1D
US: 327/141 327/31 327/74 331/17 331/18 331/25 331/36C 360/57



Family:

Publication number	Publication date	Application number	Application date
CA945675 A1	19740416	CA19710113967	19710526
DE2130372 A1	19711223	DE19712130372	19710618
DE2130372 C2	19840607	DE19712130372	19710618
FR2095373 A1	19720211	FR19710022374	19710618
FR2095373 B1	19730629	FR19710022374	19710618
GB1346854 A	19740213	GB19710016998	19710525
JP55006244 B4	19800214	JP19710043027	19710617
US3624521 A	19711130	US19700047696	19700619

Priority:

US19700047696 19700619

Probable Assignee: HONEYWELL INC

Assignee(s): (std)**:** HONEYWELL INC ; HONEYWELL INF SYSTEMS

Assignee(s): HONEYWELL INFORMATION ; HONEYWELL INFORMATION SYSTEMS INC ; HONEYWELL INFORMATION SYSTEMS INC WALTHAM MASS US ; DELLICICCHI ALFRED J

Inventor(s): (std)**:** DELLICICCHI ALFRED J ; J DELLICICCHI ALFRED

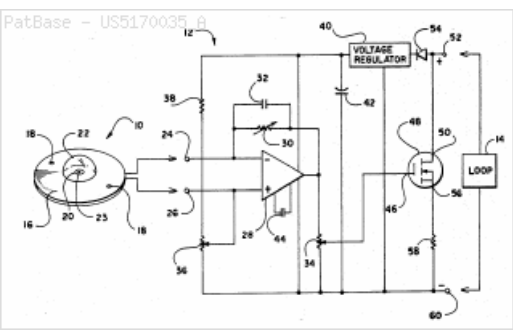
Inventor(s): DELLICICCHI ALFRED J WEST NEWTON MASS US ; ALFRED J DELLICICCHI

15) Family number: 5227693 (US5170035A)

Title: Sensor circuit for controlling flow in an instrument loop

Abstract: A circuit for controlling current flow in an instrumentation loop includes a light sensor receiving impinging light and delivering a signal varying with the intensity of the impinging light. The signal is amplified and produces a reference signal which is a current signal of about four milliamperes in the absence of incoming light and about twenty milliamperes in maximum light. A voltage controlled current driver presents an impedance to current flow through the loop which varies with the reference signal and with the intensity of the incoming light. The sensor includes a mounting plate, a photodetector mounted on the mounting plate, a filter mounted over the photodetector, and a diffuser mounted on the mounting plate forming a dome over the filter and photodetector. The diffuser disperses incoming light before the incoming light impinges the photodetector. The filter blocks infrared light thereby blue enchancing impinging light to approximate the light sensitivity response of a human eye. The sensor circuit uses a photovoltaic cell and an amplifier to obtain an output that is linearly proportional to the light level.

Classifications:
International (IPC 8-9)**:** G01J1/44 (Advanced/Invention); G01J1/44 (Core/Invention)
International (IPC 1-7)**:** G05F1/56 H01J40/14
CPC: G01J1/44
European: G01J1/44
US: 250/214A 250/214R



Family:

Publication number	Publication date	Application number	Application date

US5170035 A	19921208	US19900619235	19901128

Priority:
US19900619235 19901128

Probable Assignee: RICHARDSON ROBERT H

Assignee(s): (std)**:** RICHARDSON ROBERT H ; WEBSTER LEE R

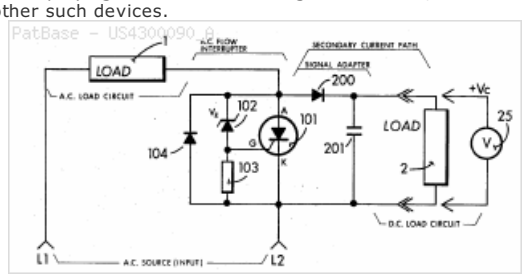
Inventor(s): (std)**:** WEBSTER LEE R ; RICHARDSON ROBERT H

16) Family number: 11042745 (US4300090A)

Title: DIRECT CURRENT POWER SUPPLY

Abstract: Direct Current power supply for providing a relatively low stabilized d.c. voltage from a relatively high a.c. voltage primary power source without the use of a transformer. The d.c. value is developed across a variable impedance device coupled substantially in series with the current path established between the source of a.c. power and a functional load coupled to the source of a.c. power. Through effective control of the variable impedance so as to be at a minimum value, e.g. low impedance, through one half-cycle of the a.c. waveform and further to purposefully effect a high impedance through a small part of the second half-cycle whereupon it changes to a condition of low impedance, a stable unidirectional current flow is established in a secondary circuit which is filtered and results in a stabilized direct current power source well suited for supplying low demand circuits as typified by solid-state control circuits employing transistors and integrated circuits; microprocessors; low power amplifiers, oscillators, and timers; and other such devices.

Classifications:
International (IPC 8-9): G05F3/18 H02M3/135 H02M5/257 H02M7/155 (Advanced/Invention);
G05F3/08 H02M3/04 H02M5/02 H02M7/12 (Core/Invention)
International (IPC 1-7): G05F3/02
CPC: G05F3/18 H02M3/135 H02M5/257 H02M7/155 H02M2001/0006 H02M2001/009 Y10T307/25
European: G05F3/18 H02M3/135 H02M5/257 H02M7/155 T02M1/00C1 T02M1/00S2
US: 307/11 323/237 323/267 323/300 323/311 323/324



Family:

Publication number	Publication date	Application number	Application date
US4300090 A	19811110	US19790016932	19790302
US4300090 B1	19930126	US19790016932	19790302

Priority:
US19790016932 19790302

Probable Assignee: WEBER HAROLD J

Assignee(s): (std)**:** WEBER HAROLD J

Assignee(s): SAVVY FRONTIERS PATENT TRUST ; SAVVY FRONTIERS PATENT TRUST PO BOX

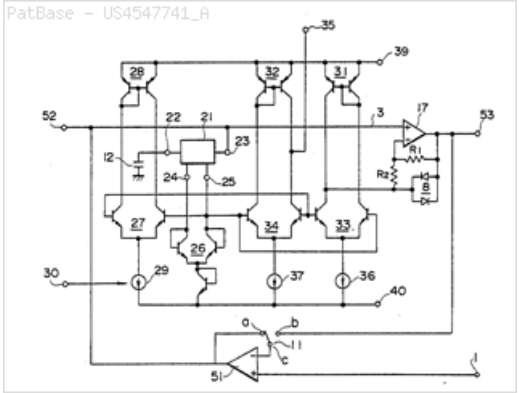
Inventor(s): (std)**:** HAROLD J WEBER ; WEBER HAROLD J

17) Family number: 2098783 (US4547741A)

Title: Noise reduction circuit with a main signal path and auxiliary signal path having a high pass filter characteristic

Abstract: A noise reduction circuit has a main signal path and an auxiliary signal path having the characteristics of a high-pass filter with a controllable cut-off frequency, a control circuit varies the cut-off frequency of the high-pass filter as a function of the auxiliary signal path output. The auxiliary signal path current is derived as a current source output so that the summing of the main signal and auxiliary signal can be accomplished by a single operational amplifier, without requiring a buffer amplifier as in known noise reduction circuits. The auxiliary signal path includes a voltage-to-current converter having differential inputs and differential outputs, with a PN junction pair and at least first and second common emitter transistor pairs connected to the differential outputs. The output current of the first common emitter transistor pair is fed back to a differential input terminal of the voltage-to-current converter, and the auxiliary signal path output is derived from the second emitter common transistor pair.

Classifications:
International (IPC 8-9): G11B20/04 H03G7/00 H03G9/18 H04B1/64 H04B15/00 (Advanced/Invention);
G11B20/04 H03G7/00 H03G9/00 H04B1/62 (Core/Invention)
International (IPC 1-7): G11B20/04 G11B5/033 H03F1/26 H03F3/68 H03G7/00 H03G7/06 H04B1/62 H04B1/64 H04B15/00
CPC: H03G9/18 H04B1/64
European: H03G9/18 H04B1/64
US: 330/149 330/151 330/260 330/295 333/14



Family:

Publication number	Publication date	Application number	Application date
CA1195387 A1	19851015	CA19830428798	19830525
DE3319292 A1	19831201	DE19833319292	19830527
DE3319292 C2	19931021	DE19833319292	19830527

FR2527864 A1	19831202	FR19830008934	19830530	
FR2527864 B1	19870109	FR19830008934	19830530	
GB2122056 A1	19840104	GB19830014958	19830531	
GB2122056 B2	19860312	GB19830014958	19830531	
GB8314958 A0	19830706	GB19830014958	19830531	
HK65789 A	19890825	HK19890000657	19890817	
JP1756624 C3	19930423	JP19820092279	19820529	
JP4047488 B4	19920804	JP19820092279	19820529	
JP58209234 A2	19831206	JP19820092279	19820529	
SG8990155 A	19890714	SG19890090155	19890310	
US4547741 A	19851015	US19830497415	19830524	

Priority:

JP19820092279 19820529 CA19830428798 19830525

Probable Assignee: SONY A CORP OF JAPAN CORP

Assignee(s): (std): SONY CORP

Assignee(s): SONY KK ; KATAKURA MASAYUKI ; SONY A CORP OF JAPAN CORP

Inventor(s): (std): KATAKURA MASAYUKI

Inventor(s): MASAYUKI KATAKURA ; KATAKURA MASAYUKI YOKOHAMA KANAGAWA JP

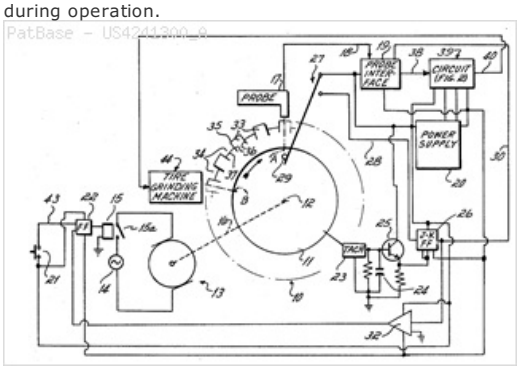
Agent(s): GOWLING LAFLEUR HENDERSON LLP

18) Family number: 1642834 (US4241300A)

Title: CIRCUIT RESPONSIVE TO RATE CHANGE IN AMPLITUDE OF ANALOG ELECTRICAL SIGNAL FOR USE IN TIRE PROCESSING APPARATUS

Abstract: An electronic circuit with an output that may be used, for example, to control a servo system which positions grinders of a tire grinding machine to correct tires with large cleats is disclosed. The electronic circuit is responsive to an analog electrical signal to detect whether or not the rate of change in amplitude of the analog electrical signal equals or exceeds a preselected limit. If the rate of change in amplitude of the analog electrical signal does not equal or exceed the preselected limit, the output of the electronic circuit has a characteristic that is similar to the analog electrical signal. If the rate of change in amplitude of the analog electrical signal equals or exceeds the preselected limit, the output of the electronic circuit preferably remains constant at an amplitude which the analog electrical signal attained prior to the change in amplitude at a rate equal to or in excess of the preselected limit. Broadly, the electronic circuit functions as a slope discrimination system which permits passage of an analog electrical signal if the rate of change in amplitude is below a predetermined rate but blocks passage of the analog electrical signal when the rate of change in amplitude reaches or surpasses the predetermined rate. Circuitry is preferably provided to adjustably preset the value for the preselected limit. Additional circuitry is preferably provided to facilitate automatic reset during operation.

Classifications:
International (IPC 8-9): G01R19/12
G01R19/165 (Advanced/Invention);
G01R19/12 G01R19/165 (Core/Invention)
International (IPC 1-7): G05B1/02 G05B11/18
CPC: G01R19/12 G01R19/16585 Y10S451/92
European: G01R19/12 G01R19/165H4
US: 157/13 318/560 318/590 318/636 327/91 451/1 451/254 451/920 73/146 73/462



Family:

Publication number	Publication date	Application number	Application date
DE2811594 A1	19780928	DE19782811594	19780317
US4241300 A	19801223	US19770780610	19770324

Priority:

US19770780610 19770324

Probable Assignee: EAGLE PICHER IND INC

Assignee(s): (std): EAGLE PICHER IND INC

Assignee(s): EAGLE PICHER INDUSTRIES INC ; ILLINOIS TOOL WORKS INC ; MICRO POISE HOLDINGS US INC

Inventor(s): (std): HAYES RICHARD H ; HERRMANN ROBERT W

Inventor(s): W HERRMANN ROBERT ; H HAYES RICHARD

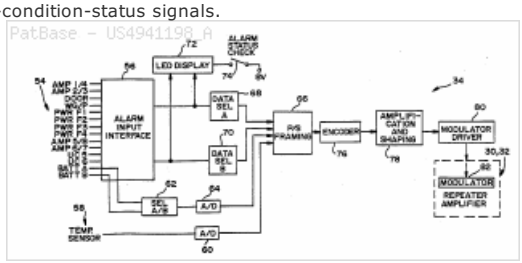
19) Family number: 3512858 (US4941198A)

Title: Communications repeater monitoring system

Abstract: A monitoring and alarm system for a radio frequency microwave communications repeater unit. A plurality of signals representative of the status of a corresponding plurality of operating conditions of the repeater unit are simultaneously generated. The signals are time multiplexed to form a combined signal. The combined signal is encoded to form a digital signal of frames of data having a frequency substantially less than the communication signal carrier frequency and preferably less than the communication modulating signal frequency, with a frame being formed of data from each of the status signals. A variable attenuator is responsive to the digital signal for varying the level of the communication signal proportionally with the value of the digital signal. The level-varied communication signal is then retransmitted. At a receiver unit for receiving the retransmitted communication signal there is an automatic gain control circuit responsive to the signal level of the received retransmitted communication signal for generating a control signal indicative of the level of the received communication signal. The digital signal is regenerated from this control signal and is decoded into a plurality of output

signals corresponding to and representative of the original operating-condition-status signals.

Classifications:
International (IPC 8-9): H04B1/60 (Advanced/Invention); H04B1/00 (Core/Invention)
International (IPC 1-7): H04B1/60 H04B17/02
CPC: H04B1/60
European: H04B1/60
US: 370/110.1 370/110.4 370/13.1 370/246 370/527 375/213 375/3.1 455/67 455/67.7 455/9



Family:

Publication number	Publication date	Application number	Application date
US4941198 A	19900710	US19870120529	19871112

Priority:

US19870120529 19871112

Probable Assignee: SILICON VALLEY BANK

Assignee(s): (std): PENINSULA ENGINEERING GROUP IN

Assignee(s): PENINSULA ENGINEERING GROUP INC ; PENINSULA ENGINEERING GROUP INC A CORP OF CA ; REPEATER TECHNOLOGIES INC ; SILICON VALLEY BANK ; SILICON VALLEY BANK ATTN LOAN DOCUMENTATION GROUP ; TRANSAMERICA BUSINESS CREDIT CORP

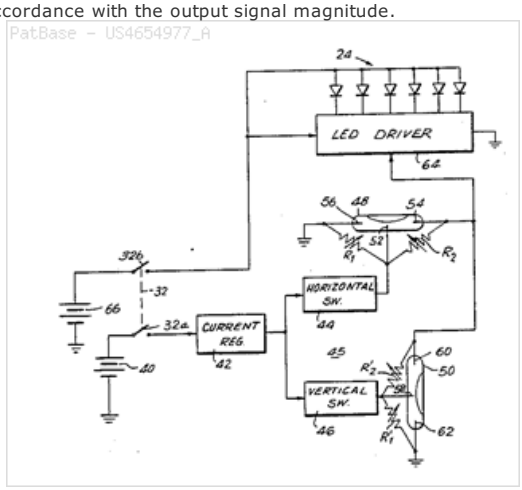
Inventor(s): (std): JOHNSON EDWARD R ; LUTZ JOSEPH F ; PARANDOOSH LADAN A

20) Family number: 2181865 (US4654977A)

Title: ELECTRONIC LEVEL

Abstract: An electronic level having a horizontal and/or a vertical transducer, each of which exhibits an effective impedance that is a function of the deviation of that transducer from a reference plane. Preferably, each transducer is an electrolytic transducer formed of a container partially filled with electrolytic liquid. Depending upon the general horizontal or vertical orientation of the level, one or the other transducer is connected to a drive signal generating circuit which supplies an output drive signal of a magnitude that is a function of the impedance of that transducer. This output drive signal is applied to a display driver which, in turn, drives an array of visual indicators in accordance with the output signal magnitude.

Classifications:
International (IPC 8-9): G01C5/02 G01C9/06 (Advanced/Invention); G01C5/00 G01C9/00 (Core/Invention)
International (IPC 1-7): G01B7/30 G01C5/02 G01C9/06 G01C9/20
CPC: G01C9/06
European: G01C9/06
US: 33/366 33/366.12 33/366.21 33/379



Family:

Publication number	Publication date	Application number	Application date
GB2183345 A1	19870603	GB19860024329	19861010
GB2183345 B2	19900523	GB19860024329	19861010
GB8624329 A0	19861112	GB19860024329	19861010
JP62121308 A2	19870602	JP19860270852	19861113
KR19870005237 A	19870605	KR19860009502	19861111
KR900007291 B1	19901008	KR19860009502	19861111
US4654977 A	19870407	US19850799406	19851119

Priority:

US19850799406 19851119

Probable Assignee: IRWIN MEASURING TOOL

Assignee(s): (std): EWIN MAGERING TOOLS CO ; IRWIN MEASURING TOOL

Assignee(s): IRWIN MEASURING TOOL CO ; IRWIN MEASURING TOOL COMPANY ; AAUIN MEJIYARINGU TOOL CO

Inventor(s): (std): EDOWAADO PEIKASU ; PAKUS EDWARD ; PAKERS EDWARD

Inventor(s): EDWARD PAKUS

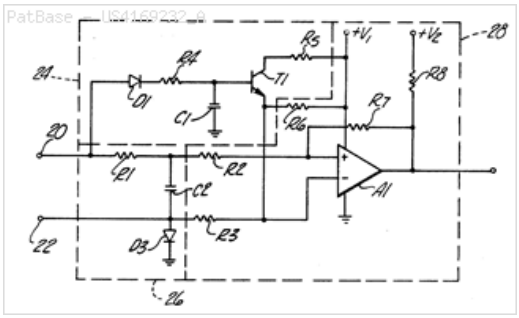
21) Family number: 1547898 (US4169232A)

Title: SIGNAL CONDITIONING CIRCUIT FOR MAGNETIC SENSING MEANS

Abstract: A signal conditioning circuit for the output of a magnetic position sensor is disclosed. The magnetic sensor

generates a total output signal that increases as a function of the rotational velocity of the sensor with a spurious noise component that is a relatively constant percentage of the actual signal voltage over the speed range. In a preferred embodiment, the signal conditioning circuit discriminates between the noise component and the signal component by comparing the total signal to a variable threshold only after a positive going zero cross. The variable threshold is generated as a function of the peak amplitude of the total signal. In a second embodiment the signal conditioning circuit includes gain control means which varies the amplitude of the total output signal as a function of its peak to maintain the threshold above the noise component.

Classifications:
International (IPC 8-9): F02P17/04 F02P7/067 F02P7/077 G01D5/245 G01P3/48 H03K5/08 H03K5/1536 (Advanced/Invention); F02P17/00 F02P7/00 G01D5/12 G01P3/42 H03K5/153 (Core/Invention)
International (IPC 1-7): F02M F02P17/00 G01B7/30 G01D5/245 G01N G01P G01R17/00 G05D5/06 H03K5/08 H03K5/153
CPC: F02P7/0775 F02P7/0675 F02P17/04 G01P3/4802 H03K5/1536
European: F02P17/04 F02P7/067D F02P7/077B G01P3/48C H03K5/1536
US: 307/354 324/173 324/207.25 324/392 327/72 327/78 327/79 73/114.26 73/119A



Family:

Publication number	Publication date	Application number	Application date
CA1115375 A1	19811229	CA19780306073	19780623
DE2837669 A1	19790315	DE19782837669	19780829
ES472907 A1	19791016	ES19780472907	19780829
FR2404256 A1	19790420	FR19780024933	19780829
GB2008354 A1	19790531	GB19780032433	19780807
GB2008354 B2	19820310	GB19780032433	19780807
IT1098246 A	19850907	IT19780027099	19780829
IT7827099 A0	19780829	IT19780027099	19780829
JP54046577 A2	19790412	JP19780104489	19780829
US4169232 A	19790925	US19770828806	19770829
US4258324 A	19810324	US19790010572	19790209

Priority:
US19770828806 19770829 CA19780306073 19780623 US19790010572 19790209

Probable Assignee: BENDIX CORP
Assignee(s): (std): BENDIX CORP
Assignee(s): BENDIX THE CORP ; SIEMENS BENDIX AUTOMOTIVE ELECTRONICS LP ; HENRICH ROBERT S
Inventor(s): (std): HENRICH ROBERT S ; ROBAATO SAMIYUERU HENRITSUCHI
Inventor(s): S HENRICH ROBERT
Agent(s): MACRAE AND CO

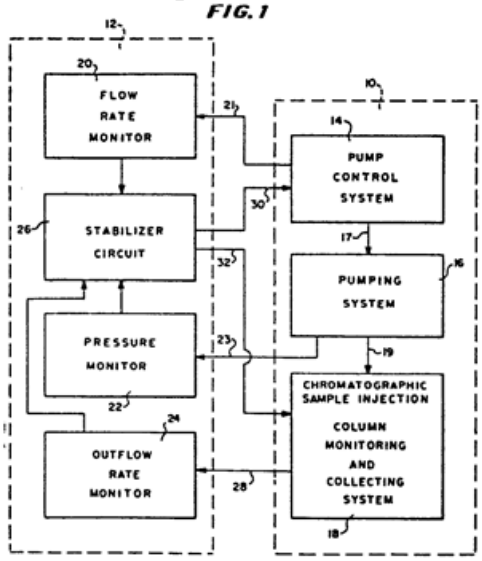
22) Family number: 28748966 (US4422942A)

Title: Method for liquid chromatography

Abstract: To stabilize flow rate in a single-stroke, syringe-type high pressure pump to a constant value after turn-on, a control system increases the pump speed until equilibrium conditions are reached and then pumps at the preset rate. In one embodiment, the control system senses the maximum rate of change of pressure, detects a pressure when the rate of change is two-thirds of the maximum, increases the pump rate until the pressure is three times that at the value of the detected pressure and begins pumping at the preset constant flow rate. In other embodiments: (1) a pumping system is operated at a flow rate ten times the preset flow rate and, when the time derivative of the pressure has dropped to nine tenths of its maximum, the pump motor speed is reduced to the preset flow rate; (2) the outflow of the column is measured under no load conditions at the desired flow rate and when a column is connected, the pumping speed is increased until the same outflow results before reducing the pumping rate; and (3) the system is operated in a constant pressure mode to a point at which the pressure is estimated to provide the desired flow rate, the flow rate measured, and if the flow rate is not the preset one, a new pressure measurement is set and the procedure repeated. In a constant pressure system, the speed of a recording chart is adjusted to the pumping speed to provide a chromatogram with abscissae of flow rate units.

Classifications:
International (IPC 8-9): B01D15/08 G01N30/00 G01N30/32 (Advanced/Invention); B01D15/08 G01N30/00 (Core/Invention)
International (IPC 1-7): B01B13/05 B01D15/08 G01N30/00 G01N30/32 G01N31/08 G06F15/46
CPC: G01N30/32 G01N2030/326 A61M16/16
European: G01N30/32 S01N30/32C
US: 128/200.11 128/203.28 210/101 210/103 210/137 210/193.2 210/198.2 210/656 210/659 210/741 215/3 417/43 417/44 417/44.1 417/44.2 422/70 43/129 700/282 702/47 73/19.04 73/23.23 73/23.24 73/61.1C 73/61.52 73/61.57

FIG. 1



Family:

Publication number	Publication date	Application number	Application date
DE3279571 D1	19890427	DE19823279571	19820719
DE3279769 D1	19890720	DE19823279769	19820719
DE3280321 D1	19910425	DE19823280321	19820719
DE3280335 D1	19910613	DE19823280335	19820719
DE3578221 D1	19900719	DE19853578221	19850222
EP0073913 A2	19830316	EP19820106487	19820719
EP0073913 A3	19840411	EP19820106487	19820719
EP0073913 B1	19890322	EP19820106487	19820719
EP0153712 A2	19850904	EP19850101949	19850222
EP0153712 A3	19870715	EP19850101949	19850222
EP0153712 B1	19900613	EP19850101949	19850222
EP0217318 A2	19870408	EP19860113314	19820719
EP0217318 A3	19870729	EP19860113314	19820719
EP0217318 B1	19890614	EP19860113314	19820719
EP0218163 A2	19870415	EP19860113316	19820719
EP0218163 A3	19870701	EP19860113316	19820719
EP0218163 B1	19910508	EP19860113316	19820719
EP0222123 A2	19870520	EP19860113315	19820719
EP0222123 A3	19870722	EP19860113315	19820719
EP0222123 B1	19910320	EP19860113315	19820719
JP1752761 C3	19930408	JP19820157406	19820909
JP2075753 C3	19960725	JP19900336976	19901130
JP3179257 A2	19910805	JP19900336976	19901130
JP4039033 B4	19920626	JP19820157406	19820909
JP58055855 A2	19830402	JP19820157406	19820909
JP7099366 B4	19951025	JP19900336976	19901130
US4422942 A	19831227	US19810300567	19810909
US4769153 A	19880906	US19860902974	19860902
US4772388 A	19880920	US19820415471	19820907
US4775481 A	19881004	US19870083889	19870810
US4781824 A	19881101	US19860902921	19860902
US4882781 A	19891121	US19820415276	19820907
US5040126 A	19910813	US19850787016	19851015
US73913 A	18680128		00000000

Priority:

US19810300567 19810909
EP19820106487 19820719
US19820415471 19820907
US19820415472 19820907
US19820415276 19820907
JP19820157406 19820909
US19840585905 19840302
US19850787016 19851015
US19860902974 19860902
US19860902921 19860902
US19870083889 19870810

Probable Assignee: ISCO INC A CORP OF NE

Assignee(s): (std): ISCO INC

Assignee(s): ISCO INC A CORP OF NE ; ISUKO INC ; ISCO INC LINCOLN NEBR US

Inventor(s): (std): ALLINGTON ROBERT W ; ROBAATO UIRIAMU AARINTON ; ALLINGTON ROBERT WILLIAM

Inventor(s): MASON M MILES ; ALLINGTON ROBERT WILLIAM LINCOLN NEBRASKA 68505 US ; ALLINGTON ROBERT WILLIAM LINCOLN NEBRASKA 68502 US

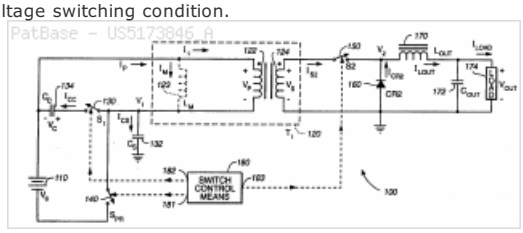
Designated states: CH DE FR GB LI NL SE

1) Family number: 14433028 (US5173846A)

Title: ZERO VOLTAGE SWITCHING POWER CONVERTER

Abstract: A circuit for utilizing the magnetizing current in the transformer of a converter to reset the transformer's core and to provide a zero-voltage-switching condition on the converter's primary switch is disclosed. The power converter includes a transformer having a primary winding and a second winding, the secondary winding being coupled to an output load and a primary switch connected in series between the primary winding and a voltage source. The closing of the primary switch causes energy to be stored in the transformer and the opening of the primary switch causes the energy to be released from the transformer. The utilization circuit includes a series combination of a storage capacitor and a first switch coupled in parallel with one of the transformer's windings to capture the energy released from the transformer. The captured energy is used to reset the transformer's core and to create a zero voltage switching condition across the primary switch. A second switch means is connected in series with the secondary winding of the transformer and is operated to prevent the loading effects of the secondary from interrupting the creation of the zero-voltage switching condition.

Classifications:
International (IPC 8-9): H02M1/44 H02M3/335 (Advanced/Invention); H02M1/00 H02M3/24 (Core/Invention)
International (IPC 1-7): H02M3/335
CPC: H02M3/33576 H02M1/44
European: H02M1/44 H02M3/335S2
US: 363/131 363/20 363/21 363/21.14 363/65 363/71 363/97



Family:

Publication number	Publication date	Application number	Application date
US5173846 A	19921222	US19910668587	19910313
US5206800 A	19930427	US19920892226	19920602
US5309344 A	19940503	US19920943008	19920909
US5331533 A	19940719	US19920944130	19920911
WO9216995 A1	19921001	WO1992GB00450	19920312
WO9324988 A1	19931209	WO1993GB00887	19930428

Priority:
US19910668587 19910313 US19920892226 19920602 US19920943008 19920909 US19920944130 19920911

Probable Assignee: ASTEC INT LTD
Assignee(s): (std): ASTEC INT LTD
Assignee(s): ASTEC INT LTD A CORP OF HONG KONG ; ASTEC INTERNATIONAL LIMITED ; ASTEC INTERNATIONAL LTD ; ASTEC INT
Inventor(s): (std): SMITH DAVID A ; SMITH DAVID ANTHONY
Designated states: AT BE CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE

2) Family number: 29542040 (US5761225A)

Title: Optical fiber amplifier eled light source with a relative intensity noise reduction system

Abstract: A power boosted source of broadband optical power comprising a broadband light source, optical fiber amplifier and a relative intensity noise reduction system. The optical fiber amplifier amplifies the power level of the optical input signal to provide a power boosted source of broadband optical power out of an output port. A coupler samples a portion of the broadband optical power out of the output port as a sample portion signal. A detector and transimpedance amplifier detect the optical signal and provide a buffered signal having an instantaneous amplitude that faithfully characterizes the intensity of the sample portion signal. A bandpass amplifier amplifies the buffered signal and provides an output control signal to a light source responsive to a composite bias and control current for providing an output optical signal. The output optical signal is coupled to the input of the optical fiber amplifier to be the optical input signal to the optical fiber amplifier. The output optical signal from the ELED has a substantially constant output intensity level and smooth and bell shaped broad band spectrum with a center optical wavelength within the gain bandwidth of the optical fiber amplifier.

Classifications:
International (IPC 8-9): G01C19/72 G02B6/00 H01S3/06 H01S3/067 H01S3/083 H01S3/0933 H01S5/0683 H04B10/16 (Advanced/Invention); H01S3/23 H01S5/068 (Advanced/Non-invention); G01C19/72 G02B6/00 H01S3/06 H01S3/081 H01S3/0915 H01S5/00 (Core/Invention); H01S3/23 (Core/Non-invention)
International (IPC 1-7): G01C19/72 G02B6/00 H01S3/06 H01S3/083 H01S3/0933 H01S3/133 H01S3/23 H01S3/30 H04B10/16
CPC: G01C19/72 G01C19/721 H01S3/06795 H01S5/06817 H01S5/0683
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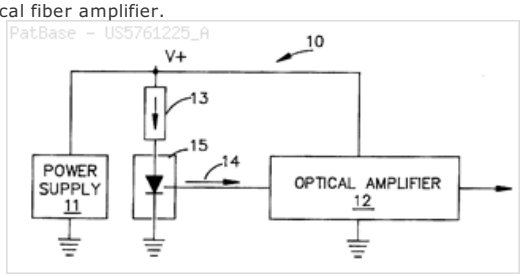
US: 372/6



Family:

Publication number	Publication date	Application number	Application date
CA2219592 AA	19990429	CA19972219592	19971029

EP0911930 A1	19990428	EP19970308540	19971027
JP11145534 A2	19990528	JP19970301606	19971104
US5761225 A	19980602	US19960652770	19960523

Priority:

US19960652770 19960523 EP19970308540 19971027 CA19972219592 19971029 JP19970301606 19971104

Probable Assignee: NORTHROP GRUMMAN SYSTEMS CORP

Assignee(s): (std): LITTON SYSTEMS INC

Assignee(s): MICHAL RONALD JAMES ; NORTHROP GRUMMAN SYSTEMS CORP ; PATTERSON RALPH A ; STEELE JAMES ROSS ; FIDRIC BERNARD G ; GOLDNER ERIC LEE ; LITTON SYST INC

Inventor(s): (std): FIDRIC BERNARD G ; GOLDNER ERIC LEE ; MICHAL RONALD JAMES ; PATTERSON RALPH A ; STEELE JAMES ROSS ; RONALD JAMES MICHAEL ; PATTERSON RALPH ; JAMES ROSS STEELE ; FIDRIC BERNARD C ; FIDRIC BERNARD

Agent(s): MACRAE AND CO; MOTOMIYA TERUHISA; FUJINO IKUO; TAKANASHI NORIMICHI; UBUKATA KAZUO; KATO NOBUAKI; TAKAHASHI SEIICHIRO; OCHI TAKAO; USUI SHINICHI; OKABE MASAO; YOSHIZAWA HIROSHI; ASAHI NOBUMITSU

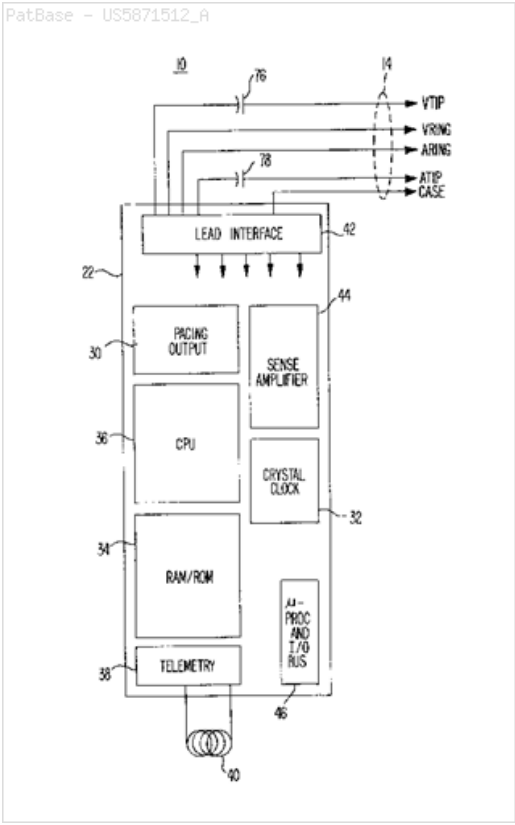
Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

3) Family number: 30421042 (US5871512A)

Title: Microprocessor capture detection circuit and method

Abstract: Software programmable device means such as a microprocessor are employed to discriminate between evoked response signals and post-pace polarization signals sensed by an implantable medical device. The polarity of the positive or negative change in voltage in respect of time (or dv/dt) of the waveform incident on the lead electrodes is monitored during a short period of time immediately following a paced event. It has been discovered that the post-pace polarization signal exhibits a relatively constant polarity during the capture detect window, and that the evoked response signal may cause the polarity of post-pace polarization signal to reverse during the capture detect window. The sign of the post-pace polarization polarity, either positive or negative, is determined by the design of the specific output circuitry. The evoked response signal may reverse the polarity of the sensed signal in either case, from positive to negative or from negative to positive, during the time window of interest. When the magnitude of the post-pace polarization is so great that the evoked response does not reverse the polarity of the waveform, discrimination of the evoked response may be achieved by noting an acceleration (or increasing magnitude of dv/dt) in the sensed signal or waveform.

Classifications:
International (IPC 8-9): A61N1/37 (Advanced/Invention); A61N1/362 (Core/Invention)
International (IPC 1-7): A61H1/37 A61N1/37
CPC: A61N1/371 A61N1/3716
European: A61N1/37D K61N1/37D4
US: 607/28



Family:

Publication number	Publication date	Application number	Application date
AU199871586 A1	19981124	AU19980071586	19980424
DE69819001 D1	20031120	DE19986019001	19980424
DE69819001 D1	20031120	DE19986019001T	19980424
DE69819001 T2	20040624	DE19986019001T	19980424
EP0998328 A1	20000510	EP19980918711	19980424
EP0998328 B1	20031015	EP19980918711	19980424
US5871512 A	19990216	US19980058422	19980409
US5873898 A	19990223	US19970841064	19970429
US6134473 A	20001017	US19990291514	19990414
US6144881 A	20001107	US19980157220	19980918
US6163724 A	20001219	US19990385655	19990827
WO9848893 A1	19981105	WO1998US08322	19980424

Priority:

US19970841064 19970429 US19980058422 19980409 WO1998US08322 19980424
US19980157220 19980918 US19990291514 19990414 US19990385655 19990827

Probable Assignee: MEDTRONIC INC

Assignee(s): (std): MEDTRONIC INC

Inventor(s): (std): BLOW A ; HEMMING T ; MORRISON M ; PECK C ; SCHUELKE J ; SCOTT M MORRISON ; ROBERT J SCHUELKE ; MICHAEL T HEMMING ; BRIAN A BLOW ; BRADLEY C PECK ; SCHUELKE ROBERT JOHN ; SCHUELKE ROBERT J ; PECK BRADLEY C ; MORRISON SCOTT M ; HEMMING MICHAEL TODD ; HEMMING MICHAEL T ; BLOW BRIAN A

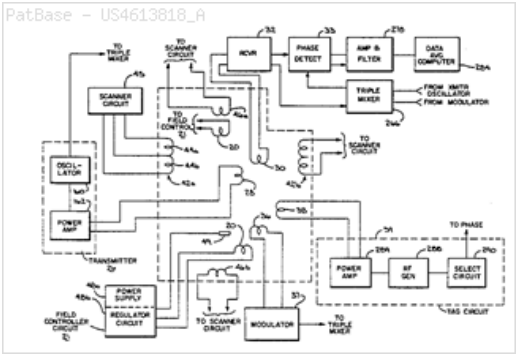
Designated states: AT AU BE CA CH CY DE DK ES FI FR GB GR IE IT JP LU MC NL PT SE

4) Family number: 3613099 (US4613818A)

Title: Nuclear magnetic resonance blood flowmeter

Abstract: Blood flow in human limbs is measured non-invasively by a nuclear magnetic resonance blood flowmeter which includes a pair of polarizing magnets whose fields are stabilized by electromagnets in each pole piece that are energized in accordance with the magnetic flux of the magnets as sensed by a Hall effect sensor. Blood molecules are either self-tagged by the polarizing field or are separately tagged by a tag coil whose field is orthogonal to the polarizing field. Once tagged, the variation in the magnetic moment of the molecule due to the tagging is detected by the variation in voltage in the receiver coil which is located orthogonally to the transmitter coil so as to reduce crosscoupling therebetween. Two sets of scanner coils, one located parallel to and the other orthogonal to the polarizing field directions, respectively, are energized to create a pair of intersecting null planes which act to cancel nuclear magnetic resonance response detected by the receiver everywhere but along the line where the two null planes intersect. By varying the current in the scanner coils, the resulting line of intersection of the null planes can be moved in two dimensions so as to scan the limb thereby allowing blood flow measurement at various locations within the limb.

Classifications:
International (IPC 8-9): A61B5/026 G01F1/56 G01F1/716 G01N24/08 G01R33/02 G01R33/07 G01R33/563 (Advanced/Invention);
A61B5/026 G01F1/56 G01F1/704 G01R33/54 (Core/Invention)
International (IPC 1-7): G01N24/06 G01N24/08 G01R33/22
CPC: A61B5/0263 G01F1/56 G01F1/716 G01R33/563
European: A61B5/026D G01F1/56 G01F1/716 G01R33/563
US: 324/224 324/306 324/309 324/320



Family:

Publication number	Publication date	Application number	Application date
CA1234869 A1	19880405	CA19840445862	19840123
US4613818 A	19860923	US19830505686	19830620

Priority:

US19830505686 19830620 CA19840445862 19840123

Probable Assignee: WISCONSIN MED COLLEGE INC

Assignee(s): (std): WISCONSIN MED COLLEGE INC

Assignee(s): THE MEDICAL COLLEGE OF WISCONSIN INC ; MEDICAL COLLEGE OF WISCONSIN INC THE ; SANCES ANTHONY JR ; MEDICAL COLLEGE OF WISCONSIN INC THEAF ; ANTONICH FREDERICK J ; BATTOCLETTI JOSEPH H ; HALBACH RICHARD E ; KNOX THOMAS A ; MEDICAL COLLEGE OF WISCONSIN INC

Inventor(s): (std): ANTONICH FREDERICK J ; BATTOCLETTI JOSEPH H ; HALBACH RICHARD E ; KNOX THOMAS A ; SANCES JR ANTHONY ; SANCES ANTHONY JR

Inventor(s): SANCES ANTHONY JRUS ; KNOX THOMAS AUS ; HALBACH RICHARD EUS ; BATTOCLETTI JOSEPH HUS ; ANTONICH FREDERICK JUS

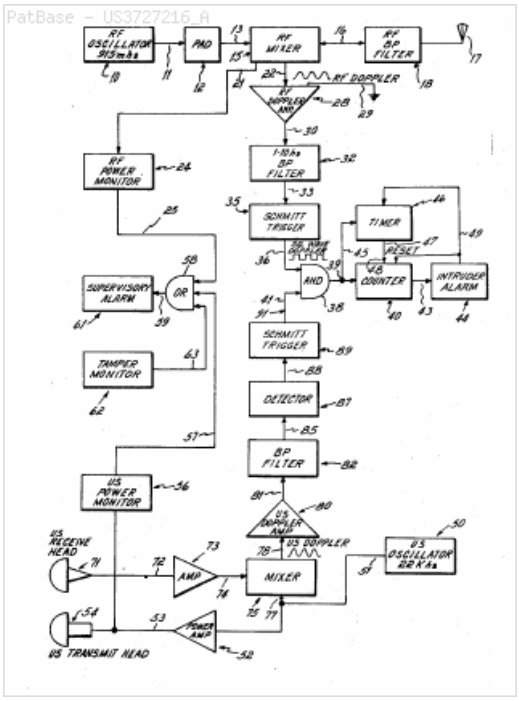
Agent(s): FETHERSTONHAUGH AND CO

5) Family number: 7285110 (US3727216A)

Title: ELECTROMAGNETIC AND ULTRASONIC DOPPLER CORRELATION INTRUSION ALARM SYSTEM

Abstract: An intrusion alarm system includes an electromagnetic doppler sub-system and an ultrasonic doppler sub-system having outputs correlated to trigger an alarm. A threshold signal is produced when the detected ultrasonic doppler signal reaches a given level to open a gate. The electromagnetic doppler frequency signal is converted to a doppler frequency square wave which passes as a series of pulses through the opened gate. These pulses actuate an accumulator which is provided with a timed reset, which clears the accumulator at a specified time after the first pulse sets the timer, unless a prescribed minimum number of pulses have accumulated within the specified time to cause the alarm to be actuated.

Classifications:
International (IPC 8-9): G01S13/56 G01S13/86 G08B13/16 (Advanced/Invention);
G01S13/00 G08B13/16 (Core/Invention)
International (IPC 1-7): G01S13/00 G01S9/42 G08B13/24
CPC: G01S13/862 G01S13/56 G08B13/1645
European: G01S13/56 G01S13/86 G08B13/16A2
US: 340/554 342/28 342/52 367/94



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US19710110735 19710128

Probable Assignee: MOSLER SAFE CO

Assignee(s): (std)**:** MOSLER SAFE CO

Assignee(s): MOSLER SAFE CO US

Inventor(s): (std)**:** ANTONIO J

Inventor(s): ANTONIO J US

6) Family number: 10995180 (US5772963A)

Title: ANALYTICAL INSTRUMENT HAVING A CONTROL AREA NETWORK AND DISTRIBUTED LOGIC NODES

Abstract: An analytic instrument utilizing a Control Arena Network (CANBUS) and nodal architecture in the instrument with functions and logic distributed throughout the Nodes. A system controller is connected on the one hand to an operator input device for controlling the instrument, and on the other hand to a plurality of nodes via a CAN scrambler. Each nodes has a CAN microcontroller and related circuitry for performing autonomously a variety of functions of the instrument. The system controller and nodes communicate using CAN interface devices over the CANBUS, passing instructions, commands and data therebetween.

Classifications:

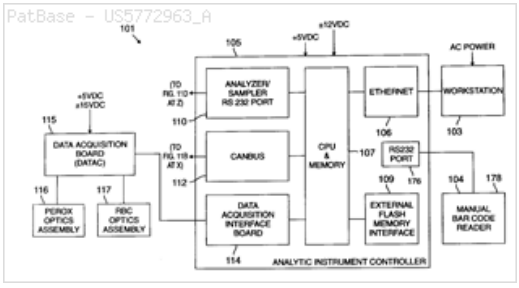
International (IPC 8-9): G01N15/14 G01N21/01 G01N21/05 G01N21/27 G01N21/47 G01N33/49 H01S5/042 (Advanced/Invention); H01S5/068 H01S5/0683 (Advanced/Non-invention); G01N15/14 H01S5/00 (Core/Invention)

International (IPC 1-7): G01N15/14 G01N21/01 G01N21/05 G01N21/27 G01N21/47 G01N33/49 G01N35/00 H01J40/14 H01S3/00 H01S5/042 H01S5/0683 H03F3/08

CPC: G01N2021/4707 G01N2021/4716 G01N15/1429 G01N15/1425 G01N35/00871 G01N2015/0073 G01N15/1459 H01S5/042 G01N15/14 H01S5/06825 H01S5/0683 Y10T436/115831 Y10T436/25625

European: G01N15/14 G01N15/14D G01N15/14E G01N35/00G3L H01S5/042 S01N15/00T2 S01N15/14G1 S01N21/47B2 S01N21/47B4B T01S3/133E T01S5/0683 T01S5/068S

US: 128/661.08 250/214.00A 250/214A 250/573 356/39 372/31 372/38 372/38.02 422/116 422/67 422/82.05 436/164 436/179 436/50 600/454 702/31



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Publication number	Publication date	Application number	Application date
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EP0822405 A3	20040707	EP19970112322	19970718
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US5772963 A	19980630	US19960688476	19960730
US5883378 A	19990316	US19960692935	19960730
US5936986 A	19990810	US19960688507	19960730
US5953681 A	19990914	US19960688558	19960730

Priority:

US19960688476 19960730 US19960688507 19960730 US19960692935 19960730 US19960688558 19960730

Probable Assignee: SIEMENS HEALTHCARE DIAGNOSTICS INC

Assignee(s): (std): BAYER AG

Assignee(s): BAYER CORP ; SIEMENS HEALTHCARE DIAGNOSTICS INC

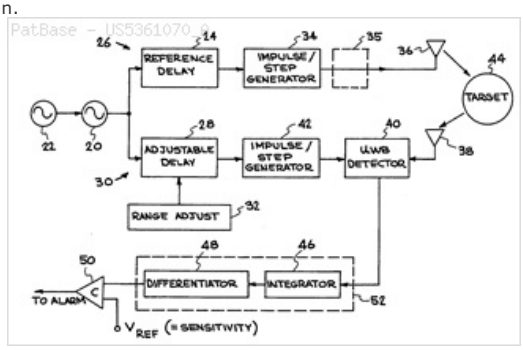
Inventor(s): (std): BUSCH JEFF ; BUSCH JEFFREY ; CANTATORE LUIGI ; CHAPARIAN LEON ; EPSTEIN MAURICE J ; FERRANTE SAVERIO E ; HETHERINGTON EDWARD J ; IRISH JOSEPH ; ROACH PAUL ; ROACH PAUL J

Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

7) Family number: 51144184 (US5361070A)

Title: ULTRA-WIDEBAND RADAR MOTION SENSOR

Abstract: A motion sensor is based on ultra-wideband (UWB) radar. UWB radar range is determined by a pulse-echo interval. For motion detection, the sensors operate by staring at a fixed range and then sensing any change in the averaged radar reflectivity at that range. A sampling gate is opened at a fixed delay after the emission of a transmit pulse. The resultant sampling gate output is averaged over repeated pulses. Changes in the averaged sampling gate output represent changes in the radar reflectivity at a particular range, and thus motion.



Classifications:

International (IPC 8-9): G01B11/00 G01C3/08 G01F23/284 G01N22/00 G01N23/00 G01P13/00 G01S1/04 G01S1/24 G01S11/02 G01S11/08 G01S13/00 G01S13/02 G01S13/04 G01S13/08 G01S13/10 G01S13/18 G01S13/32 G01S13/52 G01S13/522 G01S13/524 G01S13/56 G01S13/58 G01S13/88 G01S13/93 G01S17/10 G01S19/19 G01S19/44 G01S19/46 G01S3/46 G01S5/06 G01S5/14 G01S7/03 G01S7/28 G01S7/282 G01S7/285 G01S7/292 G01S7/32 G01S7/481 G01S7/486 G01V3/12 G06F3/033 G06F3/038 G06F3/041 G06F3/046 G06F3/048 G08B13/24 G08G1/04 H01Q1/22 H01Q1/52 H01Q19/10 H01Q9/30 H03K17/95 H04B1/26 H04B1/69 H04B1/7163 (Advanced/Invention);
G01B11/00 G01N22/00 G01S13/00 G01S13/10 G01S13/88 G01S13/93 G01S5/06 G01S7/03 G01S7/28 G01S7/285 G01S7/481 G01S7/486 G01V3/12 G06F3/033 G06F3/041 G06F3/048 H04B1/69 H04B1/7163 (Advanced/Non-invention);
G01B11/00 G01C3/08 G01F23/284 G01N22/00 G01P13/00 G01S1/00 G01S11/00 G01S13/00 G01S17/00 G01S19/00 G01S3/14 G01S5/14 G01S7/28 G01S7/285 G01V3/12 G06F3/033 G06F3/041 G06F3/048 G08B13/24 G08G1/04 H01Q1/22 H01Q19/10 H01Q9/04 H03K17/94 (Core/Invention);
G01S7/03 G01S7/285 G01S7/48 G01S7/481 H04B1/69 (Core/Non-invention)

International (IPC 1-7): G01B11/00 G01B15/02 G01B21/00 G01B7/02 G01C3/08 G01N22/00 G01N23/00 G01P13/00 G01R17/00 G01R27/00 G01R27/06 G01R29/02 G01S1/24 G01S11/02 G01S11/06 G01S11/08 G01S13/00 G01S13/02 G01S13/04 G01S13/08 G01S13/10 G01S13/12 G01S13/18 G01S13/32 G01S13/52 G01S13/522 G01S13/524 G01S13/56 G01S13/58 G01S13/88 G01S13/93 G01S17/10 G01S3/02 G01S3/46 G01S5/06 G01S7/03 G01S7/28 G01S7/282 G01S7/285 G01S7/292 G01V3/12 G01V3/17 G06F3/03 G06F3/033 G08B13/24 G08G1/04 H03K17/95 H04B1/69 H04K1/00

CPC: G01F23/284 G01S5/06 G01V3/12 G08G1/04 G08B13/2497 G01C3/08 G01S17/10 H01Q1/225 H01Q9/30 H01Q19/106 G01S7/03 H04B1/71637 H01Q1/22 G01S7/285 G01S13/003 G01S13/0218 G01S13/04 G01S13/103 G01S13/106 G01S13/885 G01S2013/9314 G01S2013/9321 G01S1/045 G01S5/14 G01S11/02 G01S7/282 G01S7/4811 G01S7/486 G01S17/105 G01S17/107 A61B5/7239 G01S13/888 A61B5/0507 G01S13/0209 G01S13/18 G01S13/56 H04B1/69 H04B1/7163

European: A61B5/05M G01C3/08 G01F23/284 G01S1/04B G01S11/02 G01S13/00B G01S13/02B G01S13/02H G01S13/04 G01S13/18 G01S13/56 G01S13/88F1 G01S17/10 G01S5/06 G01S5/14 G01S7/282 G01S7/285 G01V3/12 G08B13/24C4 G08G1/04 H01Q1/22 H01Q1/22E H01Q19/10D H01Q9/30 H04B1/69 H04B1/7163 H04B1/7163E S01S13/00B S01S13/02B S01S13/10D S01S13/10F S01S13/18 S01S13/88D S01S13/93C1 S01S13/93C3 S01S17/10C S01S17/10G S01S5/06 S01S7/03 S01S7/282 S01S7/285 S01S7/481B S01S7/486 T04B1/69P T04B1/7163

US: 324/639 324/642 324/67 34/221 340/552 342/126 342/128 342/136 342/137 342/200 342/21 342/22 342/27 342/28 342/386 342/387 342/389 342/457 342/463 342/465 342/91 342/94 342/95 356/5.01 356/5.02 356/5.03 356/5.08 375/E1.001 375/E10.01

Family:

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Probable Assignee: LAWRENCE LIVERMORE NATIONAL SECURITY LLC

Assignee(s): (std)**:** MCEWAN THOMAS E ; REGENTS FO THE UNIV OF CALIFOR ; THE UNIV OF CALIFORNIA ; UNIV CALIFORNIA ; REGENTS FO UNIV OF CALIFOR

Assignee(s): REGENTS FO UNIV OF CALIFORNIA ; UNIV ; US DEPARTMENT OF ENERGY ; THE UNIVERSITY OF CALIFORNIA ; UNIV OF CALIFORNIA ; THE UNIV OF CALIFORNIA OAKLAND ; THE REGENTS OF THE UNIVERSITY OF CALIFORNIA OAKLAND ; ENERGY UNITED STATES DEPARTMENT OF ; ENERGY US DEPARTMENT OF ; LAWRENCE LIVERMORE NATIONAL SECURITY LLC ; MCEWAN THOMAS EDWARD ; OF CALIFORNIA THE UNIV ; THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ; OF CALIFORNIA UNIV ; REGENTS OF THE UNIVERSITY OF CALIFORNIA THE ; REGENTS OF THE UNIVERSITY OF CALIFORNIA ; THE REGENTS OF UNIVERSITY OF CALIFORNIA ; REGENTS OF UNIV OF CALIFORNIA ; THE REGENTS FO THE UNIV OF CALIFORNIA

Inventor(s): (std)**:** MCEWAN E ; MCEWAN THOMAS E ; MCEWAN THOMAS EDWARD ; MCEWAN THOMS E

Inventor(s): THOMS E MCEWAN ; THOMAS E MCEWAN

Agent(s): MARKS AND CLERK; IMASHIRO TOSHIO; NAKAMURA MINORU; MURAKOSO HIROO; SHISHIDO KAICHI; OGAWA NOBUO; OHTSUKA FUMIAKI

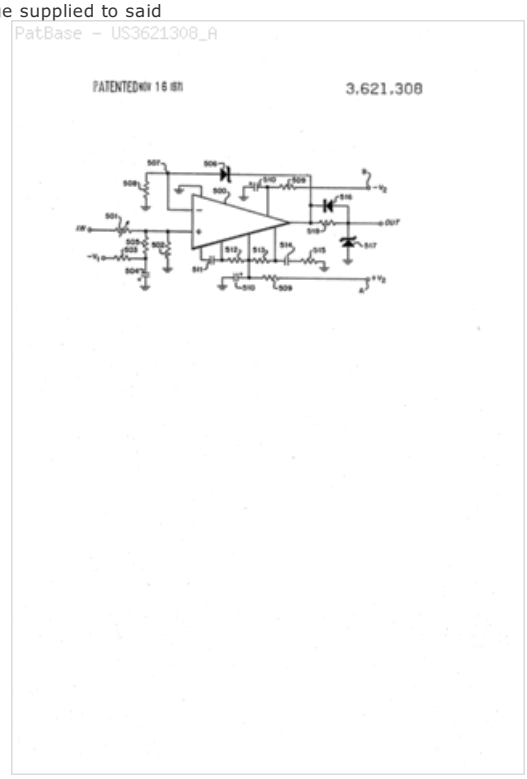
Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CY CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG US UZ VN

8) Family number: 979244 (US3621308A)

Title: LEVEL DETECTOR

Abstract: (Claim 1) 1. 1. A level detector for converting analog signals to digital signals comprising: an operational amplifier having a noninverting and an inverting input; a zener diode, the anode of which is connected to said inverting input of said operational amplifier and the cathode of which is connected to the output of said operational amplifier; first means connected to the output of said operational amplifier for limiting the positive output swing thereof; second means connected at one thereof to said first means and at the other end to said zener diode for limiting the negative output swing of said operational amplifier; an adjustable resistor divider network to provide preselectable threshold levels connected at one end thereof to said noninverting input and adapted to receive the analog signals at the other end thereof; and a first decoupling network operatively connected at one end thereof to said resistor divider network and adapted to receive a negative voltage at the other end thereof, whereby said operational amplifier provides a high digital output when the voltage difference between the analog signal supplied to said resistor divider network and the voltage supplied to said

Classifications:
International (IPC 8-9): H03K3/0233 (Advanced/Invention); H03K3/00 (Core/Invention)
International (IPC 1-7): H03K3/26 H03K5/08
CPC: H03K3/02337
European: 95C20B H03K3/0233F
US: 307/318 327/13 327/28 327/567 327/77



Family:

Publication number	Publication date	Application number	Application date
US3621308 A	19711116	US19690788861	19690103

Priority:

US19690788861 19690103

Probable Assignee: US NAVY

Assignee(s): (std)**:** US NAVY

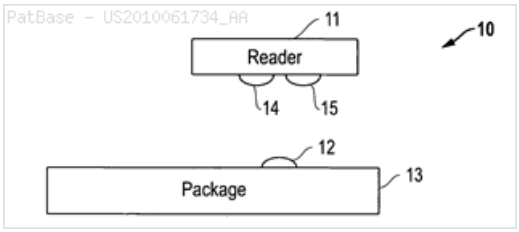
Assignee(s): NAVY USA

Inventor(s): (std): DUSHECK GEORGE J JR
Inventor(s): GEORGE J DUSHECK JR

9) Family number: 44517300 (US2010061734A)

Title: OPTICAL COMMUNICATION DEVICE, METHOD AND SYSTEM

Abstract: Exemplary optical communication devices are described which, in certain embodiments, derive power optically from and communicate optically to a reading device. The communication devices may also receive data from modulated light from the reading device to achieve a bi-directional optical communication link between the self-powered optical communication device and the reading device. In some embodiments, the communication device is powered by ambient light, such as sunlight, captures data from a sensor, and communicates the stored data some time later to a reading device. In some embodiments, the communication device is powered locally and communicates through air, optical fiber, or other medium with another communication device.



Classifications:
International (IPC 8-9): C12Q1/68 G01J1/32 G01K7/00 G01R31/08 G02F1/13 G02F1/133 G02F1/1335 G02F1/13357 G03B21/14 G06F11/00 G06F3/038 G08C23/04 G09F9/00 G09F9/30 G09F9/33 G09G3/14 G09G3/20 G09G3/22 G09G3/30 G09G3/32 G09G3/34 G09G3/36 G09G5/00 G09G5/08 G09G5/10 H01J40/00 H01L31/062 H01L31/14 H01L51/50 H04B10/00 H04B10/02 H04B10/03 H04B10/10 H04B10/11 H04B10/114 H04B10/116 H04B10/275 H04B10/28 H04B10/43 H04B10/80 H04B5/02 H04J14/08 H04L12/24 H04L12/26 H04L12/28 H04L12/40 H04L12/413 H04L12/42 H04L12/43 H04L12/437 H04L12/56 H04L12/64 H04L12/66 H04L12/70 H04L12/703 H04N3/14 H05B33/02 H05B33/08 H05B33/12 H05B37/00 H05B37/02 H05B39/04 H05B41/24 (Advanced/Invention); F21K9/232 F21K9/238 F21S9/03 F21Y115/10 H04B10/04 H04L12/40 (Advanced/Non-invention); G06F11/00 H04B10/02 H04B10/10 H04B10/28 H04B5/02 H04L12/28 H04L12/56 (Core/Invention)
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European: H04B10/1143 H04B10/807 H04L12/28H3B H04L12/40A1 H04L12/413 H04L12/42 H04L12/43 H04L12/437 H04L12/64B H04L12/66 H04L45/28 H05B33/08D3B4 H05B37/02B2 H05B37/02B6R H05B37/02B8 T04L12/28H11B T04L12/40V1 Y02B20/42 Y02B20/46 Y02B20/48
US: 1/1 250/205 250/552 250/552S 250/553 250/553P 257/290 315/150 315/152 315/155 315/158 315/158P 315/158S 315/159 315/161 315/161S 315/250 315/250P 315/287 315/287S 315/291 315/291P 315/294 315/294S 315/307 315/307S 315/308 315/311 315/322 315/322S 345/102 345/102S 345/146 345/158 345/158P 345/207 345/207P 345/46 345/690 345/690P 345/690S 345/76 345/77 345/77S 345/82 345/82S 345/83 348/297 349/68 353/20 370/222 370/222P 370/226 370/226P 370/258 370/258S 370/392 370/392S 370/400 370/400S 374/183 398/103 398/103P 398/106 398/118 398/119 398/128 398/128P 398/130 398/130S 398/138 398/138S 398/140 398/140S 398/154 398/155 398/171 398/171S 398/172 701/210 701/32 701/32.1 701/36 701/410

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CN102577622 B	20141015	CN201080032373	20100707
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JP5714649 B2	20150507	JP20130118780	20130605
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KR20120042978 A	20120503	KR20127003792	20100707
KR20120049903 A	20120517	KR20127005884	20100805
US2010061734 AA	20100311	US20090584143	20090901
US2010188972 AA	20100729	US20090360467	20090127
US2010327764 AA	20101230	US20100803805	20100707
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US2013183042 AA	20130718	US20130773322	20130221
US2015015147 AA	20150115	US20140305472	20140616
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WO10098811 A3	20101209	WO2010US00219	20100126
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Priority:

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US20160296258 20161018	US20180953202 20180413	

Probable Assignee: LUTRON KETRA LLC

Assignee(s): (std): FIREFLY GREEN TECH INC ; FIREFLY GREEN TECHNOLOGIES INC ; HO HORACE C ; KETRA INC ; KNAPP DAVID J ; SMSC HOLDINGS SARL ; SMSC HOLDING S A R L ; SMSC HOLDINGS S A R L ; LEWIS JASON ; LUTRON KETRA LLC ; LUTRON ELECTRONICS CO

Assignee(s): LUTRON ELECTRONICS CO INC ; MICROCHIP TECHNOLOGY INC ; SMSC HOLDING SARL

Inventor(s): (std): KNAPP DAVID J ; LEWIS JASON ; HO HORACE C ; DAVID J KNAPP

Agent(s): LOHR GEORG; MURGITROYD GEORGE EDWARD; MERCER DANIEL JOHN; YAMAKAWA MASAKI; OKEEFE EGAN PETERMAN AND ENDERS LLP; DAFFER MCDANIEL LLP; KEVEN L; KEVIN L; KEVIN; MATHESON KEYS DAFFER AND KORDZIK PLLC; YANEK AMY; FARBANISH GLEN; SMITH PHILIP; PETERMAN BRIAN W; DAFFER KEVIN L

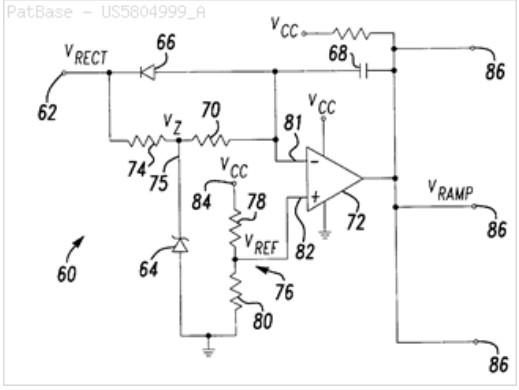
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

10) Family number: 8769395 (US5804999A)

Title: Appliance AC power control apparatus

Abstract: An apparatus for controlling an electrical appliance coupled with an output terminus and configured to operate in response to an alternating input signal, such as input AC power. The apparatus comprises a reference signal generator for receiving the input signal and generating a reference signal (either VRAMP or VCONTROL) in response to the input signal, and a control circuit for controlling connection of the input signal to the output terminus in response to the reference signal and to a user-defined set-point signal. The control circuit is coupled with the reference signal generator and with a set-point terminal. The set-point terminal receives the set-point signal and the control circuit controls connection of the input signal with the output terminus in response to a predetermined relationship between the reference signal and the set-point signal; the apparatus is capable of generating a modified periodically interrupted AC power output based on an AC power input. In a preferred embodiment, the modified AC power output is asymmetrically periodic.

Classifications:
International (IPC 8-9): G05B11/06 G05F1/445 H02M5/257 H03B19/16 H03K17/79 H03K4/08 H03K4/50 H03K4/501 H03K4/56 (Advanced/Invention);
G05F1/10 H02M5/02 H03K17/79 H03K4/00 (Core/Invention)
International (IPC 1-7): G05B11/06 G05F1/445 H02M5/257 H03B19/16 H03K19/082 H03K4/06 H03K4/08 H03K4/50 H03K4/501
CPC: H02M5/2573 H03K4/56 H03K17/79
European: H02M5/257C H03K17/79 H03K4/56
US: 327/110 327/126 327/131 327/137 327/139 327/365 327/561



Family:

Publication number	Publication date	Application number	Application date
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CA2229071 AA	19980209	CA19962229071	19960809
CA2229071 C	20000613	CA19962229071	19960809
EP0843913 A1	19980527	EP19960928109	19960809
EP0843913 A4	19990203	EP19960928109	19960809
JP2000512404 T2	20000919	JP19970508676T	19960809
US5804999 A	19980908	US19950512814	19950809
WO9706598 A1	19970220	WO1996US12974	19960809

Priority:

US19950512814 19950809 WO1996US12974 19960809

Probable Assignee: JOHNSON CONTROLS TECHNOLOGY CO

Assignee(s): (std): JOHNSON CONTROLS INC ; JOHNSON SERVICE CO

Assignee(s): JOHNSON SERVICE COMPANY ; JOHNSON CONTROLS TECHNOLOGY CO ; DEBOER DAVID P ; DIVJAK AUGUST A

Inventor(s): (std): DIVJAK AUGUST A ; DEBOER DAVID P

Inventor(s): DAVID P DEBOER ; AUGUST A DIVJAK

Agent(s): KIRBY EADES GALE BAKER

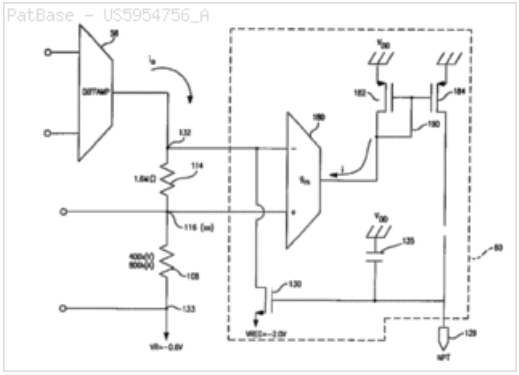
Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

11) Family number: 11711565 (US5954756A)

Title: Microprocessor capture detection circuit and method

Abstract: The present invention employs software programmable device means such as a microprocessor to discriminate between evoked response signals and post-pace polarization signals sensed by an implantable medical device. The polarity of the positive or negative change in voltage in respect of time (or dv/dt) of the waveform incident on the lead electrodes is monitored during a short period of time immediately following a paced event. It has been discovered that the post-pace polarization signal exhibits a relatively constant polarity during the capture detect window, and that the evoked response signal may cause the polarity of post-pace polarization signal to reverse during the capture detect window. The sign of the post-pace polarization polarity, either positive or negative, is determined by the design of the specific output circuitry. The evoked response signal may reverse the polarity of the sensed signal in either case, from positive to negative or from negative to positive, during the time window of interest. In another embodiment of the present invention, and when the magnitude of the post-pace polarization is so great that the evoked response does not reverse the polarity of the waveform, discrimination of the evoked response is achieved by noting an acceleration (or increasing magnitude of dv/dt) in the sensed signal or waveform.

Classifications:
International (IPC 8-9): A61N1/37 (Advanced/Invention); A61N1/362 (Core/Invention)
International (IPC 1-7): A61N1/37
CPC: A61N1/371
European: A61N1/37D
US: 607/28



Family:

Publication number	Publication date	Application number	Application date
US5954756 A	19990921	US19980058378	19980409

Priority:

US19980058378 19980409

Probable Assignee: METRONIC INC

Assignee(s): (std): MEDTRONIC INC

Assignee(s): METRONIC INC

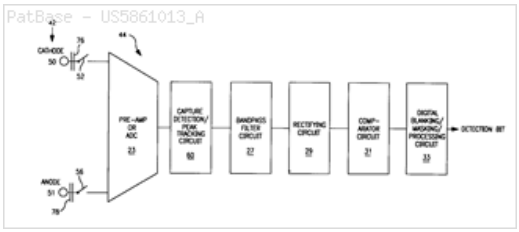
Inventor(s): (std): BLOW BRIAN A ; HEMMING MICHAEL TODD ; MORRISON SCOTT M ; PECK BRADLEY C

12) Family number: 11253791 (US5861013A)

Title: Peak tracking capture detection circuit and method

Abstract: The present invention permits discrimination between evoked response signals and post-pace polarization signals sensed by an implantable medical device by noting the polarity of the positive or negative change in voltage in respect of time (or dv/dt) of the waveform incident on the lead electrodes during a short period of time immediately following a paced event. It has been discovered that the post-pace polarization signal exhibits a relatively constant polarity during the capture detect window, and that the evoked response signal may cause the polarity of post-pace polarization signal to reverse during the capture detect window. The sign of the post-pace polarization polarity, either positive or negative, is determined by the design of the specific output circuitry. The evoked response signal may reverse the polarity of the sensed signal in either case, from positive to negative or from negative to positive, during the time window of interest. In another embodiment of the present invention, and when the magnitude of the post-pace polarization is so great that the evoked response does not reverse the polarity of the waveform, discrimination of the evoked response is achieved by noting an acceleration (or increasing magnitude of dv/dt) in the sensed signal or waveform.

Classifications:
International (IPC 8-9): A61N1/37 (Advanced/Invention); A61N1/362 (Core/Invention)
International (IPC 1-7): A61N1/37
CPC: A61N1/371
European: A61N1/37D
US: 607/28



Family:

Publication number	Publication date	Application number	Application date
AU199873632 A1	19981124	AU19980073632	19980428
DE69810926 D1	20030227	DE19986010926	19980428
DE69810926 D1	20030227	DE19986010926T	19980428
DE69810926 T2	20031224	DE19986010926T	19980428
EP0988087 A1	20000329	EP19980920894	19980428
EP0988087 B1	20030122	EP19980920894	19980428
US5861013 A	19990119	US19970841095	19970429
WO9848894 A1	19981105	WO1998US08518	19980428

Priority:

US19970841095 19970429 WO1998US08518 19980428

Probable Assignee: MEDTRONIC INC

Assignee(s): (std)**:** MEDTRONIC INC

Inventor(s): (std)**:** BLOW A ; BLOW BRIAN A ; HEMMING MICHAEL T ; HEMMING MICHAEL TODD ; HEMMING T ; MORRISON M ; MORRISON SCOTT M ; PECK BRADLEY C ; PECK C ; SCHUELKE J ; SCHUELKE ROBERT J ; SCHUELKE ROBERT JOHN

Inventor(s): SCOTT M MORRISON ; ROBERT J SCHUELKE ; MICHAEL T HEMMING ; BRADLEY C PECK ; BRIAN A BLOW

Designated states: AT AU BE CA CH CY DE DK ES FI FR GB GR IE IT JP LU MC NL PT SE