

1) Family number: 14433028 (US5173846A)

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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);

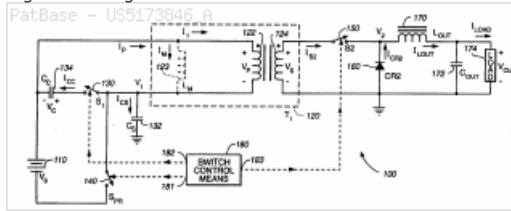
H02M1/00 H02M3/24 (Core/Invention)

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)

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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

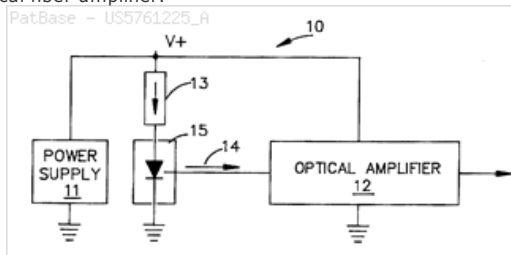
CPC: G01C19/72 G01C19/721 H01S3/06795 H01S5/06817

H01S5/0683

European: G01C19/72 G01C19/72D H01S3/067S H01S5/0683

T01S3/067S T01S5/068N

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 SEICHIRO; 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)

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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:

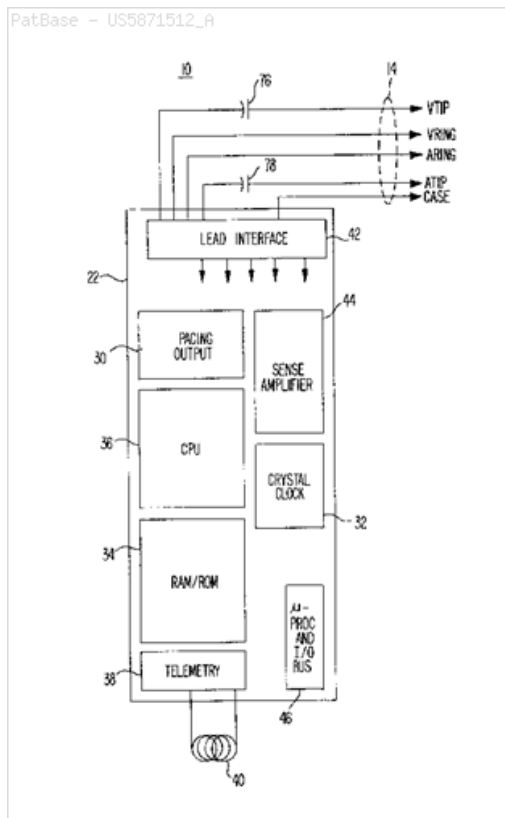
International (ipc 8-9): A61N1/37 (Advanced/Invention); A61N1/362 (Core/Invention)

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)**

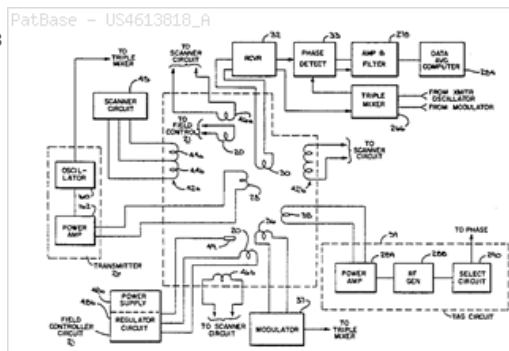
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Title: Nuclear magnetic resonance blood flowmeter

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)**

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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

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

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.

DE69430195 D1	20020425	DE19946030195
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Publication number	Publication date	Application number	Application date
AT214853 E	20020415	AT19940928687T	19940408
AT217977 E	20020615	AT19960923186T	19960315
AT233904 E	20030315	AT19950931652T	19950829
AT278969 E	20041015	AT19940119373T	19940408
AU199469054 A1	19941212	AU19940069054	19940509
AU199534999 A1	19960327	AU19950034999	19950829
AU199647422 A1	19960710	AU19960047422	19951219
AU199662493 A1	19961224	AU19960062493	19960522
AU199663766 A1	19961016	AU19960063766	19960315
AU199668421 A1	19970305	AU19960068421	19960730
CA2160352 AA	19951011	CA19942160352	19940408
CA2160352 C	20060110	CA19942160352	19940408
CA2162257 AA	19951106	CA19942162257	19940509
CA2162257 C	20051227	CA19942162257	19940509
CA2199120 AA	19970304	CA19952199120	19950829
CA2199120 C	20070508	CA19952199120	19950829
CA2208070 AA	19970618	CA19952208070	19951219
CA2208070 C	20080729	CA19952208070	19951219
CA2215506 AA	19970916	CA19962215506	19960315
CA2215506 C	20090519	CA19962215506	19960315
CA2223756 AA	19971205	CA19962223756	19960522
CA2223756 C	20090120	CA19962223756	19960522
CA2503382 AA	19941027	CA19942503382	19940408
CA2503382 C	20080805	CA19942503382	19940408
CA2605339 AA	19941027	CA19942605339	19940408
CA2605339 C	20080930	CA19942605339	19940408
CN1151382 C	20040526	CN19951097349	19951219
CN1173226 A	19980211	CN19951097349	19951219
DE69425373 D1	20000831	DE19946025373	19940509
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DE69430195 D1	20020425	DE19946030195	19940408

DE69430195 T2	20021024	DE19946030195T	19940408
DE69434064 D1	20041111	DE19946034064	19940408
DE69434064 T2	20051006	DE19946034064T	19940408
DE69525651 D1	20020404	DE19956025651	19951219
DE69525651 T2	20021010	DE19956025651T	19951219
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DE69529830 T2	20031120	DE19956029830T	19950829
DE69621331 D1	20020627	DE19966021331	19960315
DE69621331 T2	20030109	DE19966021331T	19960315
DE69623481 D1	20021010	DE19966023481	19960730
DE69623481 T2	20030220	DE19966023481T	19960730
DE69627488 D1	20030522	DE19966027488	19960522
DE69627488 T2	20031224	DE19966027488T	19960522
EP0694171 A1	19960131	EP19940928687	19940408
EP0694171 A4	19960417	EP19940928687	19940408
EP0694171 B1	20020320	EP19940928687	19940408
EP0700528 A1	19960313	EP19940917288	19940509
EP0700528 A4	19970129	EP19940917288	19940509
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EP0779990 A1	19970625	EP19950931652	19950829
EP0779990 A4	19990825	EP19950931652	19950829
EP0779990 B1	20030305	EP19950931652	19950829
EP0799428 A1	19971008	EP19950944651	19951219
EP0799428 A4	19980311	EP19950944651	19951219
EP0799428 B1	20020227	EP19950944651	19951219
EP0829020 A2	19980318	EP19960923186	19960315
EP0829020 A4	19980708	EP19960923186	19960315
EP0829020 B1	20020522	EP19960923186	19960315
EP0830566 A1	19980325	EP19960921221	19960522
EP0830566 A4	19991103	EP19960921221	19960522
EP0830566 B1	20030416	EP19960921221	19960522
EP0842440 A1	19980520	EP19960928797	19960730
EP0842440 A4	19980930	EP19960928797	19960730
EP0842440 B1	20020904	EP19960928797	19960730
EP1178330 A1	20020206	EP20010119373	19940408
EP1178330 B1	20041006	EP20010119373	19940408
JP08511341 T2	19961126	JP19940523338T	19940408
JP10505671 A2	19980602	JP19960509574	19950829
JP10505671 T2	19980602	JP19960509574T	19950829
JP10511182 T2	19981027	JP19960520016T	19951219
JP11503229 T2	19990323	JP19960529458T	19960315
JP11506825 T2	19990615	JP19970500685T	19960522
JP2004004100 A2	20040108	JP20030172294	20030617
JP2006047322 A2	20060216	JP20050305097	20051019
JP3471803 B2	20031202	JP19940523338T	19940408
JP3648236 B2	20050518	JP20030172294	20030617
JP3701968 B2	20051005	JP19940525498T	19940509
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KR100322662 B1	20020620	KR19950704500	19940408
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US5361070 A	19941101	US19930044717	19930412
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US5457394 A	19951010	US19930058398	19930507
US5510800 A	19960423	US19940300909	19940906
US5512834 A	19960430	US19940305104	19940913
US5519400 A	19960521	US19950486171	19950606
US5576627 A	19961119	US19950405644	19950317
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US5661490 A	19970826	US19960636370	19960423
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US5767953 A	19980616	US19950486081	19950606
US5774091 A	19980630	US19950451876	19950526
US5805110 A	19980908	US19970849869	19970617
WO9424579 A1	19941027	WO1994US03892	19940408
WO9427168 A1	19941124	WO1994US04813	19940509
WO9607928 A1	19960314	WO1995US11047	19950829
WO9619737 A1	19960627	WO1995US16783	19951219
WO9630771 A2	19961003	WO1996US03583	19960315
WO9630771 A3	19961121	WO1996US03583	19960315
WO9639612 A1	19961212	WO1996US07495	19960522
WO9706447 A1	19970220	WO1996US12497	19960730

Priority:

US19930044745 19930412 US19930044717 19930412 US19930058398 19930507

CA19942160352	19940408	CA19942503382	19940408	EP19940928687	19940408
CA19942605339	19940408	JP19940523338	19940408	JP19940523338	19940408
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CA20072503382	20071114				

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)

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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)

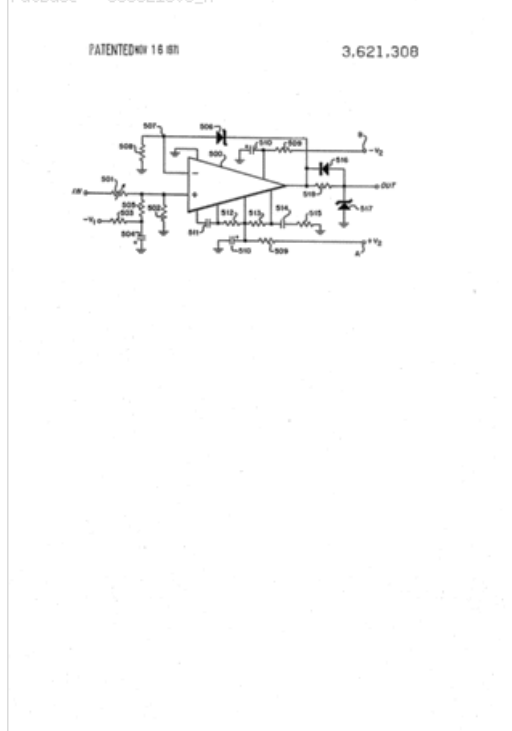
International (IPC 1-7): H03K3/26 H03K5/08

CPC: H03K3/02337

European: 95C20B H03K3/0233F

US: 307/318 327/13 327/28 327/567 327/77

PatBase - US3621308_A



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)

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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:

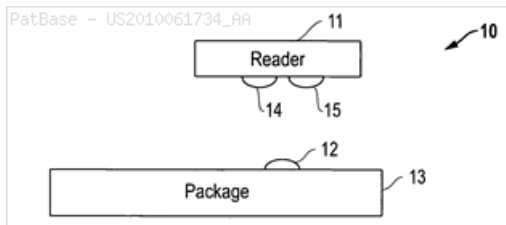
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F21K9/232 F21K9/238 F21S9/03 F21Y115/10 H04B10/04 H04L12/40 (Advanced/Non-invention); G06F11/00 H04B10/02 H04B10/10 H04B10/28 H04B5/02 H04L12/28 H04L12/56 (Core/Invention)

IPC: H04B10/1143 H04B10/807 G08C23/04 G09G3/2003 G09G3/3426 G09G2320/0242 G09G2320/0666 G09G2320/0693 H04L12/42 H05B33/08 G09G3/2018 H04L12/40013 H04L12/40045 H04L12/413 H04L12/66 H05B33/0803 H05B37/0254 H04L2012/40273 H05B33/0818 G09G3/22 G06F3/0416 G09G2320/0233 G09G2320/0626 H05B33/0872 H05B33/0815 F21S9/03 H05B33/0854 H05B37/0218 H05B37/0281 Y02B20/42 Y02B20/48 F21K9/232 F21K9/238 F21Y2115/10 H04L12/437 H04L12/43 H04L45/28 G09G3/34 H05B33/086 H05B33/0869 G08C2201/93 H04B10/116 H04L12/282 H04L12/2838 H04L12/6418 H04L2012/2841 H04L2012/285 H05B37/0272 H05B37/0245 Y02B10/10

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CN102625944 A	20120801	CN201080035731	20100805
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US2015015147 AA	20150115	US20140305472	20140616
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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)

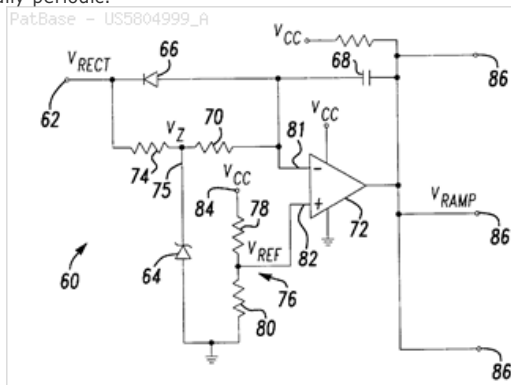
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Title: Appliance AC power control apparatus

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
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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)

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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);

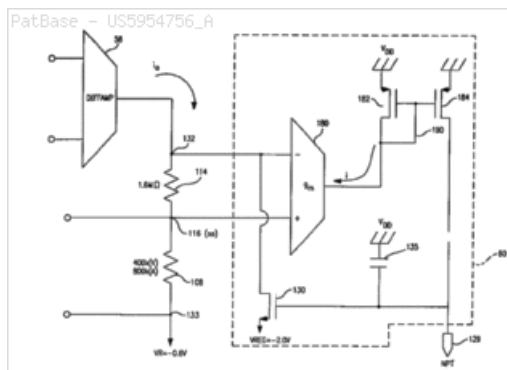
A61N1/362 (Core/Invention)

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

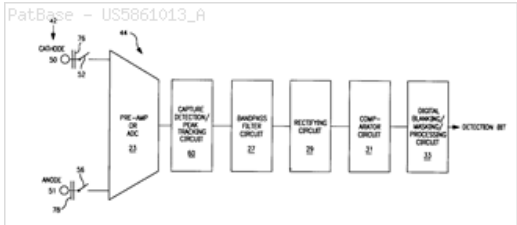
12) Family number: 11253791 (US5861013A)

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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
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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