

Search query (2): fn=(67745369 or 65478708 or 63714764 or 63734394 or 67745369 or 65478708 or 63734394 or 32759177 or 43517780 or 44412018 or 58738134 or 46833853 or 30160540 or 33254630 or 42102217 or 42461812 or 42461812 or 43986353 or 43653364 or 43956665 or 48093133 or 50014779 or 50933745 or 52529229 or 56884079 or 57355047 or 63734394 or 5216135 or 15901164 or 23517252 or 35998664 or 32760022 or 28882452 or 30353273 or 40997001 or 28882452 or 42461812 or 51087266 or 46625499 or 32790380 or 58999692 or 59225170 or 47096201)

Results: 36

1) Family number: 15901164 (US6297724B)

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Title: LIGHTING CONTROL SUBSYSTEM FOR USE IN SYSTEM ARCHITECTURE FOR AUTOMATED BUILDING

Abstract: An electrical power control system is adapted for controlling power and lighting in a building. Switch controls have either relays or triacs, controlled by microprocessors, to switch power on electrical branch circuits. An interface device 122 communicates with the switches 124,126, arranged in a multidrop configuration, with variable length data packets over serial branch circuits or data buses 142. In addition to being controlled by the interface device 122, the switch controls also have local switch actuators. The actuation of the local switch controls can be used by the interface device 122 as a control inputs to initiate other actions. Adaptive polling of switch controls is used to minimize system response time, and both transmit and receive signals are carried between the switch controls and the interface device 122 at different times on the same twisted pair wires. The interface device 122 can also communicate with a home automation system controller.

Classifications:

International (IPC 8-9): H05B37/02 (Advanced/Invention);

H05B37/02 (Core/Invention)

International (IPC 1-7): G06F15/46

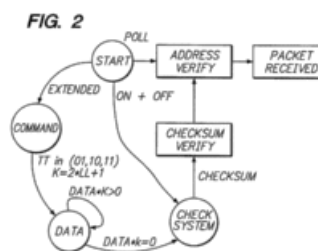
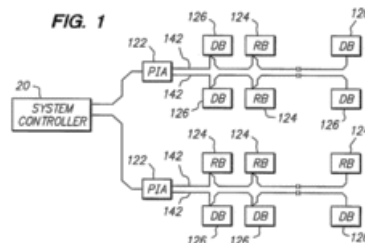
CPC: Y10T307/461 H05B47/18

European: H05B37/02B6D

US: 307/38 340/3.21 340/3.51 340/321 340/351

PatBase - US6297724_BA

U.S. Patent Oct. 2, 2001 Sheet 1 of 8 US 6,297,724 B1



Family:

Publication number	Publication date	Application number	Application date
US6297724 BA	20011002	US19960613828	19960307

Priority:

US19940303967 19940909 US19960613828 19960307

Probable Assignee: COMMScope TECHNOLOGIES LLC

Assignee(s): (std): WHITAKER CORP

Assignee(s): WHITAKER LLC ; COMMScope EMEA LTD ; COMMScope TECHNOLOGIES LLC

Inventor(s): (std): BRYANS DARRYL J ; JUMP LANCE B

2) Family number: 23517252 (US2004037221A)

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Title: METHOD, SYSTEM AND APPARATUSES FOR THE TRANSMISSION OF DATA ON ELECTRIC NETWORK

Abstract: There are described a method and a system for the transmission/reception or communication of data and/or information on electric line between two electronic control devices, including: an electric user (HA), in particular a household appliance, having a first electronic control system and at least a first electric load; a monitoring or control device (SA), having a second electronic control system, said device (SA) being located on said line between an electric power source and said first electric load. According to the invention, the transmission/reception or communication of data and/or information on said line is realized by means of an electric power modulation between said user (HA) and said device (SA), and/or vice-versa.

Classifications:

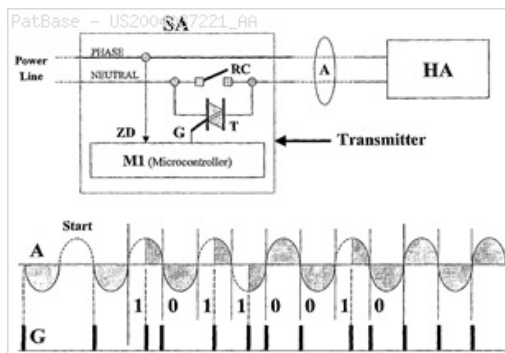
International (IPC 8-9): H02J H02J13/00

H04B3/54 (Advanced/Invention);

H02J13/00 H04B3/54 (Core/Invention);

H02J (Subclass/Invention)

International (IPC 1-7): H02J13/00 H04B3/54 H04J H04L1/00 H04M11/04
CPC: H02J13/00009 H02J2310/14 H04B2203/5412 Y02E60/783 Y04S40/123
European: H02J13/00F4B2F T02J3/14H T04B203/54M4 Y02B90/26B2D Y04S40/12B4
US: 340/12.37 340/310.01 340/310.02 340/310.06 340/310.08 340/310.11 340/310.12 340/310.16 340/310.18 370/203 370/203S 370/229 370/229P



Family:

Publication number	Publication date	Application number	Application date
AT441960 E	20090915	AT20010919687T	20010403
AU200146747 A1	20020322	AU20010046747	20010403
AU200146747 A5	20020322	AU20010046747	20010403
CN100340048 C	20070926	CN20018018395	20010403
CN1475040 A	20040211	CN20018018395	20010403
DE60139787 D1	20091015	DE20016039787	20010403
EP1316134 A1	20030604	EP20010919687	20010403
EP1316134 B1	20090902	EP20010919687	20010403
ES2331688 T3	20100113	ES20010919687T	20010403
HK1061311 A1	20080620	HK20040104228	20040611
HK1061311 A1	20040910	HK20040104228	20040611
HK1061311 A1	20080620	HK20040104228	20040611
HK1061311 A3	20040910	HK20040104228	20040611
HK1061311 B	20080620	HK20040104228	20040611
IT1320621 B1	20031210	IT2000T000840	20000905
ITTO20000840 A0	20000905	IT2000T000840	20000905
ITTO20000840 A1	20020305	IT2000T000840	20000905
JP2004508796 T2	20040318	JP20020525971T	20010403
JP4721617 B2	20110713	JP20020525971T	20010403
RU2003106189 A	20041010	RU20030106189	20010403
RU2265955 C2	20051210	RU20030106189	20010403
US2004037221 AA	20040226	US20030363757	20030804
US6950010 BB	20050927	US20010363757	20010403
WO0221664 A1	20020314	WO20011B00548	20010403

Priority:

IT2000T000840 20000905 WO20011B00548 20010403

Probable Assignee:

Assignee(s): (std): AISA VALERIO ; INDESIT CO S P A ; INDESIT CO SPA ; WRAP S P A ; WRAP SPA

Assignee(s): INDESIT COMPANY S P A

Inventor(s): (std): AISA VALERIO ; AISA V ; AJSA VALERIO

Inventor(s): VALERIO AISA ; V AISA

Agent(s): DINI ROBERTO; SHANGHAI PATENT AND TRADEMARK OFFICE ROOM 1804 TUNG WAI COMMERCIAL; SHANGHAI PATENT AND TRADEMARK OFFICE; CESARI AND MCKENNA LLP

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

3) Family number: 28882452 (US2003156014A)

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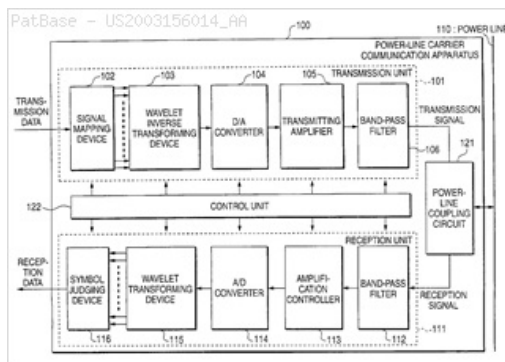
Title: POWER-LINE CARRIER COMMUNICATION APPARATUS

Abstract: The invention provides a power-line carrier communication apparatus including a transmission unit with a signal point mapping device for mapping a plurality of bit streams produced from transmission data, a wavelet inverse transforming device for modulating the respective sub-carriers by wavelet waveforms which are orthogonal to each other for producing temporal waveform series data, and a D/A converter for converting the temporal waveform series data into an analog temporal waveform series signal; and a reception unit with an A/D converter for obtaining sampling-series waveform data from a power-line communication signal, a wavelet transforming device for wavelet-transforming the sampling-series waveform data into signal point data of the respective sub-carriers, and a symbol judging device for judging bit streams mapped by the signal point mapping device by inverse-mapping a plurality of these signal point data, and for synthesizing the judged bit streams with each other as a reception data series.

Classifications:

International (IPC 8-9): G04M11/04 G05B11/01 G08B1/08 H02J3/02 H04B1/38 H04B1/66 H04B3/00 H04B3/54 H04J11/00 H04L27/00 H04L27/28 H04L5/00 H04L5/16 H04M11/04 H04Q1/30 (Advanced/Invention); H04B3/00 H04B3/54 H04J11/00 (Advanced/Non-invention); G05B11/01 G08B1/00 H02J3/02 H04B1/38 H04B1/66 H04B3/54 H04J11/00 H04L27/00 H04L27/26 H04L5/16 H04M11/04 H04Q1/30 (Core/Invention)
International (IPC 1-7): H04B3/00 H04B3/54 H04J11/00 H04M11/04
CPC: H04B3/54 H04B3/542 H04B2203/5416 H04L5/0008 H04L27/0004 H04L27/2627 H04L27/2649 H04B3/546 H04J11/00
European: H04B3/54 H04B3/54A H04L27/00B H04L5/00A2A1W T04B203/54M6

US: 307/3 307/3S 340/12.32 340/12.33 340/310.01 340/310.02
 340/310.11 340/310.110S 340/310.12 340/538 340/538.11
 340/538.110S 370/210 375/219 375/219P 375/220 375/240.18
 375/240.19 375/257 375/257P 375/258 375/259 375/260 375/260P
 375/261



Family:

Publication number	Publication date	Application number	Application date
AU2003237796 AA	20030902	AU20030237796	20030122
CN100574132 C	20091223	CN20038004516	20030122
CN1703844 A	20051130	CN20038004516	20030122
DE60347963 D1	20151008	DE20036047963	20030122
EP1468503 A2	20041020	EP20030731823	20030122
EP1468503 B1	20150826	EP20030731823	20030122
EP2259442 A1	20101208	EP20100174402	20030122
ES2550821 T3	20151112	ES20030731823T	20030122
JP2003218831 A2	20030731	JP20020015058	20020124
JP2003264485 A2	20030919	JP20020061454	20020307
JP2007135242 A2	20070531	JP20070016628	20070126
JP3931666 B2	20070620	JP20020015058	20020124
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KR100972593 B1	20100728	KR20097002757	20090211
KR20040073592 A	20040819	KR20047011484	20030122
KR20090026822 A	20090313	KR20097002757	20030122
TW200304286 A	20030916	TW20030101607	20030124
TWI302064 B	20081011	TW20030101607	20030124
US2003156014 AA	20030821	US20030349648	20030123
US2006203897 AA	20060914	US20060362502	20060227
US2009135932 AA	20090528	US20080345423	20081229
US2010322322 AA	20101223	US20100862598	20100824
US7023324 BB	20060404	US20030349648	20030123
US7498935 BB	20090303	US20060362502	20060227
US7800491 BB	20100921	US20080345423	20081229
US8072323 BB	20111206	US20100862598	20100824
WO03063380 A2	20030731	WO2003JP00556	20030122
WO03063380 A3	20031030	WO2003JP00556	20030122

Priority:

JP20020015058	20020124	JP20020061454	20020307	EP20030731823	20030122
WO2003JP00556	20030122	US20030349648	20030123	US20060362502	20060227
JP20070016628	20070126	US20080345423	20081229	US20100862598	20100824

Probable Assignee: PANASONIC CORP

Assignee(s): (std): KODAMA NOBUTAKA ; KOGA HISAO ; MATSUSHITA ELECTRIC IND CO LTD ; PANASONIC CORP

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Inventor(s): (std): TAKAO KODAMA NOBUTAKA KOGA HIS ; TAKAO GONDO ; HISAO KOGA ; NOBUTAKA KODAMA ; GONDO TAKAO ; KOGA HISAO ; KODAMA NOBUTAKA

Inventor(s): KODAMA NOBUTAKA KOGA HISAO GONDO TAKAO

Agent(s): DENNEMEYER AND ASSOCIATES SA; D YOUNG AND CO LLP; MELDRUM DAVID JAMES; VALLEJO JUAN PEDRO; STEVENS DAVIS MILLER AND MOSHER LLP; DICKINSON WRIGHT PLLC JAMES E LEDBETTER ESQ; DICKINSON WRIGHT PLLC

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

4) Family number: 30160540 (US2004004468A)

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Title: LDO REGULATOR WITH WIDE OUTPUT LOAD RANGE AND FAST INTERNAL LOOP

Abstract: A method and a circuit to achieve a low drop-out voltage regulator with a wide output load range has been achieved. A fast loop is introduced in the circuit. The circuit is internally compensated and uses a capacitor to ensure that the internal pole is more dominant than the output pole as in standard Miller compensation. The quiescent current is set being proportional to the output load current. No explicit low power drive stage is required. The whole output range is covered by one output drive stage. By that means the total consumption of quiescent or wasted current is reduced. An excellent PSRR is achieved due to load dependent bias current.

Classifications:

International (IPC 8-9): G05F1/56 G05F1/563

G05F1/575 (Advanced/Invention);

G05F1/10 (Core/Invention)

International (IPC 1-7): G05F1/40 G05F1/563 G05F1/575

CPC: G05F1/575

European: G05F1/575

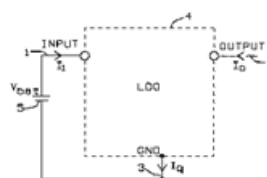


FIG. 1 - Prior Art

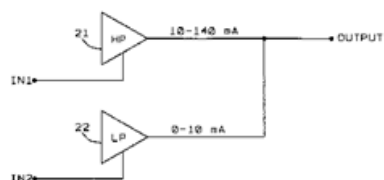


FIG. 2 - Prior Art

Publication number	Publication date	Application number	Application date
AT386969 E	20080315	AT20020368074T	20020705
DE60225124 D1	20080403	DE20026025124	20020705
DE60225124 D1	20080403	DE20026025124T	20020705
DE60225124 T2	20090219	DE20026025124T	20020705
DK1378808 T3	20080623	DK20020368074T	20020705
EP1378808 A1	20040107	EP20020368074	20020705
EP1378808 B1	20080220	EP20020368074	20020705
US2004004468 AA	20040108	US20020191849	20020709
US6856124 BB	20050215	US20020191849	20020709

EP20020368074 20020705

Probable Assignee: DIALOG SEMICONDUCTOR GMBH

Assignee(s): (std): DIALOG SEMICONDUCTOR GMBH

Inventor(s): (std): DEARN DAVE ; MALCOLM JOHN ; PANNWITZ AXEL ; MALCOLM JOHN STUART ; DEARN DAVID

Agent(s): SCHUFFENECKER THIERRY; GEORGE O; STEPHEN B

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

5) Family number: 30353273 (US2006108988A)

Title: POWER SUPPLY SYSTEM

Abstract: A power supply system for supplying power to a load is provided. The system comprises power-line carriers for supplying power to the load, and a plurality of power supply units the outputs of which are parallelly connected to power-line carriers. Each of the power supply unit comprises a generator; an inverter for converting a voltage generated by the generator into an AC voltage and outputting the AC voltage; an inverter control unit for controlling the inverter, and a connection apparatus for connecting the AC voltage outputted from the inverter to the power-line carriers. The inverter controller comprises a load sharing adjuster for adjusting a shared load current supplied from the power supply unit, so that at least one of the power supply units in operation can operated at its rating condition, thereby realizing an efficiency operation.

Classifications:

International (IPC 8-9): G05D11/00 G05F1/70 H02J1/00 H02J3/00
H02J3/46 H02M5/45 H02M5/458 H02M7/48

H02M7/493 (Advanced/Invention);

G05D11/00 G05F1/70 H02J11/00 H02J3/00 H02J3/46 H02M5/00

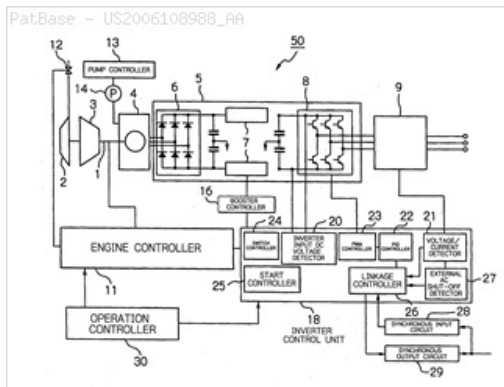
H02M7/48 (Core/Invention)

International (IPC 1-7): H02J3/38

CPC: Y10T307/25 Y10T307/414 H02J3/46 H02J9/06 H02M5/458

European: H0213/46 H02M5/458 T02J9/06

US: 307/11 307/32 323/205 700/286



Family:

Publication number	Publication date	Application number	Application date
AU2003257641 AA	20040311	AU20030257641	20030821
AU2003257641 AH	20040311	AU20030257641	20030821
EP1542331 A1	20050615	EP20030792766	20030821
EP1542331 A4	20100120	EP20030792766	20030821
JP2004019466 A1	20051215	JP20040530592T	20030821
JP4256845 B1	20090422	JP20040530592T	20030821
JP4256845 B2	20090422	JP20040530592T	20030821
US2006108988 AA	20060525	US20050525219	20050912
US7514813 BB	20090407	US20050525219	20050912
WO04019466 A1	20040304	WO2003JP10564	20030821

Priority:

JP20020241240 20020821 JP20020241243 20020821 WO2003JP10564 20030821

Probable Assignee: EBARA CORP

Assignee(s): (std): EBARA CORP ; EBARA DENSAN LTD ; FURUYA TAI ; ISHIHARA SEIICHI ; KATAOKA TADASHI ; KINOSHITA NOBORU ; MCKELVEY TERENCE ; MARUI EISHI ; MIYAMOTO MASAHIRO ; SATO MOTOYASU ; OZAWA TAKAHIDE ; ZHENG SHAOJUN

Inventor(s): (std): MCKELVEY TERENCE ; MARUI EISHI ; MIYAMOTO MASAHIRO ; SATO MOTOYASU ; KATAOKA TADASHI ; FURUYA TAI ; ISHIHARA SEIICHI ; OZAWA TAKAHIDE ; KINOSHITA NOBORU ; ZHENG SHAOJUN ; MOTOYASU SATO ; MASAHIRO MIYAMOTO ; SEIICHI ISHIHARA ; SHAOJUN ZHENG ; NOBORU KINOSHITA ; TAKAHIDE OZAWA ; EISHI MARUI ; TERENCE MCKELVEY ; TAI FURUYA ; TADASHI KATAOKA

Agent(s): SHAMOTO ICHIO ; TANAKA HIDEO ; OHTSUKA SUMIE ; NISHIYAMA FUMITOSHI ; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT PC

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

6) Family number: 32759177 (US2008063404A)

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Title: TRANSMITTING DEVICE FOR FREE-SPACE OPTICAL TRANSMISSION

Abstract: Transmitting device for free-space optical transmission. The invention relates to a transmitting device for transmission through space, using electromagnetic waves of the infrared and/or visible and/or ultraviolet bands produced by one or several discharge lamps. The device is connected by its input terminals (1) to an a.c. energy distribution system. A mains filter (2) reduces the conducted electromagnetic disturbances produced by the power circuits comprising a rectifier (3), a power-factor-correction circuit (4), a low-voltage power supply (5) and an inverter (8). The inverter (8) is connected to a series inductor (9) connected in series with a hot-cathode fluorescent lamp (10) and a capacitor (12), a parallel capacitor (11) allowing an optimal start of the lamp. A receiving set for transmission via power distribution lines (6) delivers "demodulated signals" applied to the control circuitry (7) which controls the state of the switches of the inverter (8). The light produced is modulated as a function of the "demodulated signals".

Classifications:

International (ipc 8-9): H04B10/00 H04B10/10 H04B10/105 H04B10/114 H04B10/116 H04B10/22 H05B41/26 (Advanced/Invention); H04B10/00 H04B10/10 H05B37/02 H05B41/26 (Advanced/Non-invention);

H04B10/00 H04B10/10 H04B10/105 H04B10/22

H05B41/26 (Core/Invention);

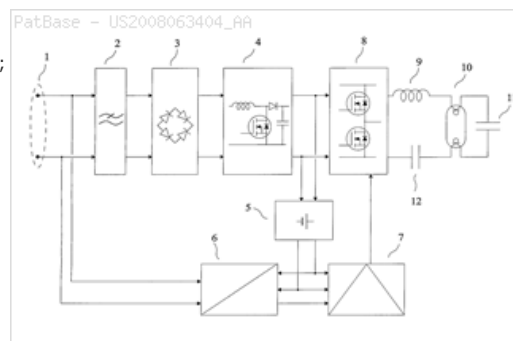
H05B37/02 (Core/Non-invention)

International (ipc 1-7): H04B10/10

CPC: H04B10/116 H04B10/1149

European: H04B10/10N H04B10/1149

US: 398/130 398/130P



Family:

Publication number	Publication date	Application number	Application date
AT467281 E	20100515	AT20050797372T	20050916
CN101095299 A	20071226	CN200580039315	20050916
CN101095299 B	20120509	CN200580039315	20050916
DE602005021131 D1	20100617	DE200560021131T	20050916
EP1797653 A2	20070620	EP20050797372	20050916
EP1797653 B1	20100505	EP20050797372	20050916
FR2875653 A1	20060324	FR20040009939	20040920
FR2875653 B1	20061020	FR20040009939	20040920
JP2008514083 T2	20080501	JP20070531875T	20050916
KR100926393 B1	20091111	KR20077008788	20050916
KR20070094728 A	20070921	KR20077008788	20050916
US2008063404 AA	20080313	US20050663177	20050916
WO06033018 A2	20060330	WO2005IB03309	20050916
WO06033018 A3	20061005	WO2005IB03309	20050916

Priority:

FR20040009939 20040920 WO2005IB03309 20050916 WO2005IB03309 20070418

Probable Assignee: ZXTALK ASSETS LLC

Assignee(s): (std): BROUDE FREDERIC ; CLAVELIER EVELYNE ; EXCEM ; EXCEM SA ; ZXTALK ASSETS LLC ; ZXTALK ASSETS L L C

Assignee(s): EXCEM SOC ANONYME ; EXCEM SOCIETE ANONYME

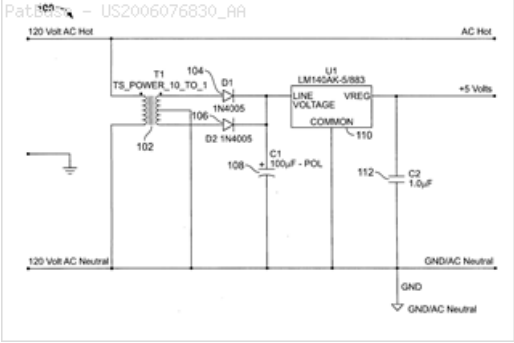
Inventor(s): (std): BROYDE FREDERIC ; CLAVELIER EVELYNE ; EVELYNE CLAVELIER ; FREDERIC BROYDE
Agent(s): HESELBERGER JOHANNES; BARDEHLE PAGENBERG; HOWREY LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

7) Family number: 32760022 (US2006076830A) © PatBase

Title: COMMUNICATION AND AC POWER SYSTEM

Abstract: A system for bidirectional data and power transmission is shown and described. In an embodiment, a network power controller provides power to a node and communicates bidirectionally with the node. In an embodiment, the network power controller is coupled to an AC power source and provides both AC and DC power to the node. In an embodiment, the network power controller and node are coupled via a conduit comprising three wires, wherein the first wire carries DC power and communications, the second wire carries AC power, and the third wire is the neutral/ground line. In another embodiment, the network power controller and node are coupled via a conduit comprising two wires, wherein the first wire carries AC power and communications and the second wire is the neutral/ground line. In an embodiment, AC power having one phase or more can be controlled at the network power controller and the node.

Classifications:
International (IPC 8-9): B60L1/00 G05B11/01 G06F15/173 G08B1/08 H04B3/54 H04L12/66 (Advanced/Invention); B60L1/00 G05B11/01 H04B3/54 (Core/Invention)
CPC: H04B3/54 H04B3/542 H04B2203/5412 H04B2203/5445 H04B2203/547
European: H04B3/54 H04B3/54A H04B3/54D T04B203/54M4 T04B203/54P8 T04B203/54S6
US: 307/1 307/10.1 307/10.100S 307/1P 340/12.32 340/310.11 340/310.110S 340/538 370/352 709/223



Family:

Publication number	Publication date	Application number	Application date
US2006076830 AA	20060413	US20050231507	20050921
US7405652 BB	20080729	US20050231507	20050921
WO06034323 A2	20060330	WO2005US33768	20050921
WO06034323 A3	20071227	WO2005US33768	20050921
WO06034323 C2	20071108	WO2005US33768	20050921

Priority:

US20040611834P 20040921 US20050231507 20050921

Probable Assignee: ABET TECHNOLOGIES LLC

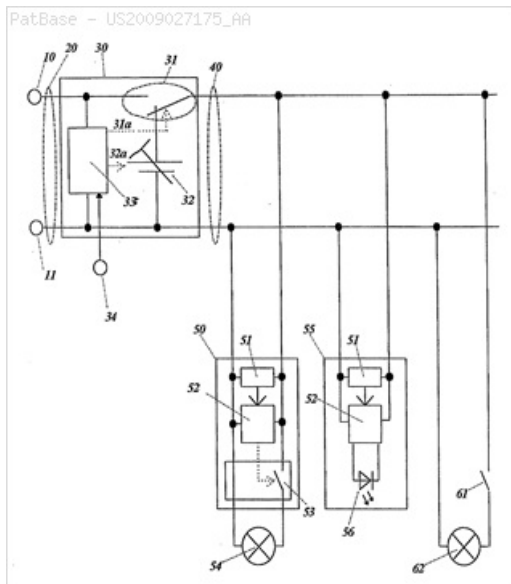
Assignee(s): (std): ABET TECHNOLOGIES LLC ; GREENE DANIEL L ; HAIR JAMES M III
Assignee(s): USRG HOLDCO IX LLC ; HAIR JAMES M
Inventor(s): (std): GREENE DANIEL L ; HAIR JAMES M III ; HAIR III JAMES M
Inventor(s): GREENE DANIEL ; HAIR JAMES MIII ; HAIR JAMES ; HAIR JAMES M
Agent(s): GARDNER CARTON AND DOUGLAS LLP ATTN PATENT DOCKET DEPT; DRINKER BIDDLE AND REATH LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

8) Family number: 32790380 (US2009027175A) © PatBase

Title: DATA TRANSMISSION METHOD AND DEVICE FOR A/C SYSTEMS

Abstract: A method for modulating the effective power in one or several power consuming devices disposed in an A/C system in order to transmit data on a power supply line thereof by specifically varying the effective power in the connected device. In order to transmit the data, the momentary value of the effective power is randomly varied (increased or decreased), and the data is impressed into the A/C supply line by a unit (transmitter or modulator) and is evaluated by another unit (receiver or demodulator).

Classifications:
International (IPC 8-9): B60Q1/00 G05B11/01 G08B1/08 G08C19/02 H02J7/00 H04B1/38 H04B3/54 H04B5/00 (Advanced/Invention); G05B11/01 H04B3/54 (Core/Invention)
CPC: H04B3/54 H04B2203/5412
European: H04B3/54 T04B203/54M4
US: 235/380 307/3 307/3S 320/106 320/108 320/138 340/10.1 340/12.32 340/12.33 340/12.330S 340/13.33 340/310.12 340/538 340/572.1 340/854.8 375/272 375/272P 455/343.2 455/41.1 455/41.2 455/572

**Family:**

Publication number	Publication date	Application number	Application date
EP1794895 A1	20070613	EP20050798001	20050929
EP1794895 B1	20181107	EP20050798001	20050929
EP1794895 B8	20190227	EP20050798001	20050929
ES2708549 T3	20190410	ES20050798001T	20050929
US2009027175 AA	20090129	US20050664183	20050929
US8988248 BB	20150324	US20050664183	20050929
WO06034866 A1	20060406	WO2005EP10544	20050929

Priority:

DE200410047082 20040929 WO2005EP10544 20050929

Probable Assignee: AIZO AG**Assignee(s):** (std): AIZO AG ; BECK WILFRIED ; HOFMANN RALPH**Inventor(s):** (std): BECK WILFRIED ; HOFMANN RALPH**Agent(s):** KATSCHER HABERMANN PATENTANWAELTE; WEBB LAW FIRM PC; WEBB LAW FIRM

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

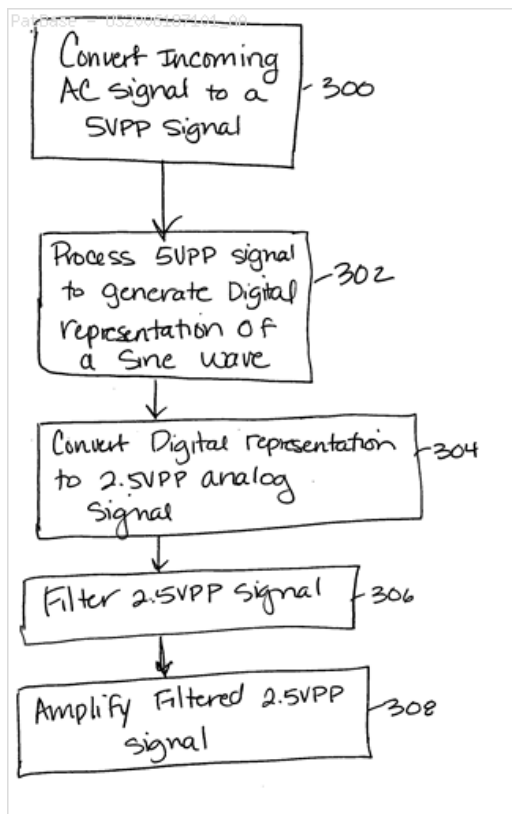
9) Family number: 33254630 (US2006187101A)

© PatBase

Title: TRACKING SUPPLY AC REGENERATION SYSTEM AND METHOD

Abstract: A circuit for implementing tracking supply alternating current ("AC") regeneration is described. In one embodiment, the circuit comprises a line synchronization device for converting an incoming AC signal to a square wave, wherein the square wave is precisely in phase with the incoming AC signal; a processor for processing the square wave to synthesize a sine wave therefrom; a digital to audio converter ("DAC") to convert the synthesized sine wave into an analog signal, wherein the analog signal is precisely in phase with the incoming AC signal; and an amplifier for amplifying the audio signal to a desired voltage level for driving a load.

Classifications:**International (IPC 8-9):** H03M1/66 (Advanced/Invention)**CPC:** H02M1/4208 H02M2001/0022 Y02B70/126**European:** H02M1/42B T02M1/00C4V Y02B70/12D**US:** 341/144 341/144P 341/147



Family:

Publication number	Publication date	Application number	Application date
US2006187101 AA	20060824	US20060345000	20060201
US7259705 BB	20070821	US20060345000	20060201

Priority:

US20050649387P 20050202 US20060345000 20060201

Probable Assignee: PS AUDIO INC

Assignee(s): (std): PS AUDIO

Assignee(s): PS AUDIO INC ; BELLA TECHNOLOGIES GROUP LLC

Inventor(s): (std): STADTHERR ROBERT P

Inventor(s): STADTHERR ROBERT

Agent(s): HAYNES AND BOONE LLP

10) Family number: 35998664 (US2008252430A)

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Title: POWERLINE PULSE POSITION MODULATED TRANSMITTER APPARATUS AND METHOD

Abstract: A transmitting controller is connected to a powerline and on command places a reference signal and a series of signal pulses in the powerline at a series of signal timing positions related to zero voltage crossing points so that the signals pulses are substantially in the powerline temporal quiet zone near zero crossing. The signal pulses are produced from a pair of capacitors and switches which are each sequentially charged a first polarity from the powerline and is discharged in the powerline at the opposite polarity so that the powerline voltage at the time of the pulse is additive to the pulse voltage. The receiving controller is connected to the powerline and has a filter circuit therein which filters away the powerline AC signal and noise to leave the reference and signal pulses. The signal pulses are compared to the position of starting reference pulses to determine in which signal timing position the pulses have occurred. Digital data is communicated over the powerline in accordance with the position placement of the data pulses related to the reference pulse positions. The timing quiet zone for transmission and signals is preferably about 500 to about 1000 microseconds away from zero voltage crossing.

Classifications:

International (IPC 8-9): G05B11/01 G05B11/26

G05B3/00 (Advanced/Invention);

G05B11/01 (Core/Invention)

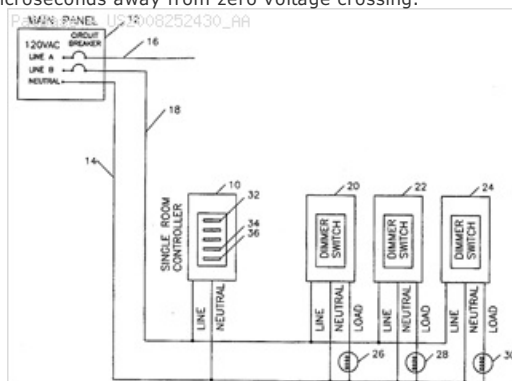
CPC: H02J13/00009 H05B47/185 Y02B70/3283 Y04S20/246

European: H02J13/00F4B2B H05B37/02B6P Y02B70/32D2D

Y04S20/24B4

US: 340/12.32 340/12.320P 340/12.33 340/12.35 340/12.37

340/310.11 340/310.12 340/310.14 340/310.16



Family:

Publication number	Publication date	Application number	Application date
US2008252430 AA	20081016	US20070780403	20070719

US7265654 BA	20070904	US20050112568	20050422
US7688183 BB	20100330	US20070780403	20070719

Priority:

US20040564499P 20040422 US20050112568 20050422 US20070780403 20070719

Probable Assignee: POWERLINE CONTROL SYSTEMS INC

Assignee(s): (std): LESTER MARSHALL E ; POWERLINE CONTROL SYSTEMS INC

Assignee(s): VALLEY ECONOMIC DEVELOPMENT CENTER INC ; CITY OF LOS ANGELES

Inventor(s): (std): LESTER MARSHALL E

Agent(s): LEWIS BRISBOIS BISGAARD AND SMITH LLP

11) Family number: 40997001 (US2007297530A)

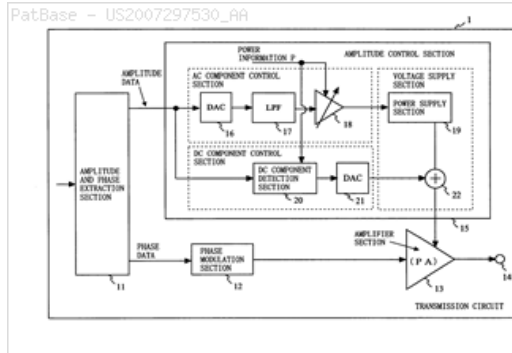
© PatBase

Title: TRANSMISSION CIRCUIT AND COMMUNICATION DEVICE

Abstract: Provided is a transmission circuit operating with high efficiency and low distortion. An amplitude and phase extraction section 11 extracts amplitude data and phase data from input data. A phase modulation section 12 phase-modulates the phase data to output a resultant signal as a phase-modulated signal. An amplifier section 13 amplifies the phase-modulated signal to output a resultant signal as a transmission signal. An amplitude control section 15 supplies, to the amplifier section 13, a voltage controlled in accordance with an AC component represented by a fluctuation component of the amplitude data and a DC component represented by an average value level of the fluctuation component of the amplitude data.

Classifications:

International (IPC 8-9): H01Q11/12 H03F1/06 H03F3/189 H03F3/24 H04B1/04 H04L27/00 (Advanced/Invention); H03F1/02 H03F3/189 H03F3/20 H04B1/04 H04L27/00 (Core/Invention)
CPC: H04L27/361 H03F1/025 H04B1/0475 H04L25/06
European: H03F1/02T1D1 H04B1/04L H04L25/06 H04L27/36A
US: 330/125 330/135 330/136 330/149 330/254 375/295 375/295P 375/296 375/297 375/300 375/302 455/108 455/110 455/114.3 455/127.1 455/127.2 455/91 455/95



Family:

Publication number	Publication date	Application number	Application date
CN101479946 A	20090708	CN200780023519	20070621
CN101479946 B	20120725	CN200780023519	20070621
DE602007039968 D1	20150305	DE200760039968T	20070621
EP2037587 A1	20090318	EP20070767325	20070621
EP2037587 A4	20120704	EP20070767325	20070621
EP2037587 B1	20150107	EP20070767325	20070621
JP2007148753 A1	20091119	JP20080522508T	20070621
US2007297530 AA	20071227	US20070812730	20070621
US7734263 BB	20100608	US20070812730	20070621
WO07148753 A1	20071227	WO2007JP62498	20070621

Priority:

JP20060174558 20060623 EP20070767325 20070621 WO2007JP62498 20070621

Probable Assignee: MATSUSHITA ELECTRIC INDUSTRIAL CO LTD

Assignee(s): (std): IKEDO TAICHI ; MAEDA MASAKATSU ; MATSUSHITA ELECTRIC IND CO LTD ; PANASONIC CORP

Assignee(s): PANASONIC KADOMA SHI CORP ; MATSUSHITA ELECTRIC INDUSTRIAL CO ; MATSUSHITA ELECTRIC INDUSTRIAL CO LTD ; MATSUSHITA ELECTRIC IND CO

Inventor(s): (std): MAEDA MASAKATSU ; IKEDO TAICHI ; MASAKATSU MAEDA ; TAICHI IKEDO

Inventor(s): MAEDA MASAKATSUC O PANASONIC 2 1 61 SHIROMI CORP ; IKEDO TAICHIC O PANASONIC 2 1 61 SHIROMI CORP ; IKEDO TAICHI C O PANASONIC CORP ; MAEDA MASAKATSU C O PANASONIC CORP

Agent(s): DENNEMEYER AND ASSOCIATES SA; GASSNER WOLFGANG; OGASAWARA SHIRO; WENDEROTH LIND AND PONACK LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

12) Family number: 42102217 (US2008192512A)

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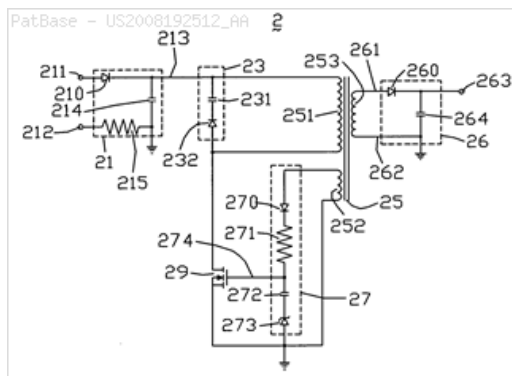
Title: DIRECT CURRENT TO DIRECT CURRENT CONVERTER

Abstract: An exemplary DC to DC converter (2) includes a transistor (29), a first rectifying and filtering circuit (21), a pulse generating circuit (27) and a transformer (25). The first rectifying and filtering circuit transforms an external AC voltage to a first DC voltage. The transformer includes a primary winding (251), an assistant winding (252) connected with the primary winding in a flyback mode, and a secondary winding (253). The first DC voltage is connected to ground via the primary winding, the transistor in series. The pulse generating circuit includes a controlling terminal, a diode, a resistor, and a capacitor. One terminal of the assistant winding is connected to ground, and the other terminal of the assistant winding is connected to an anode of the diode. A cathode of the diode is connected to ground via the resistor and the capacitor in series. The controlling terminal is connected to gate electrode of the transistor.

Classifications:**International (IPC 8-9):** H02M3/335 H02M3/338

H02M7/00 (Advanced/Invention);

H02M3/24 (Core/Invention)

CPC: H02M3/3381**European:** H02M3/338A**US:** 363/18 363/18P 363/21.12 363/21.16**Family:**

Publication number	Publication date	Application number	Application date
TW200835128 A	20080816	TW20070104977	20070212
TWI332309 B	20101021	TW20070104977	20070212
US2008192512 AA	20080814	US20080069921	20080212
US7848119 BB	20101207	US20080069921	20080212

Priority:

TW20070104977 20070212

Probable Assignee: INNOLUX CORP**Assignee(s):** (std): CHIMEI INNOLUX CORP ; INNOCOM TECH SHENZHEN CO LTD ; INNOLUX DISPLAY CORP**Assignee(s):** INNOCOM TECHNOLOGY (SHENZHEN) CO LTD ; INNOCOM TECHNOLOGY CO LTD ; INNOCOM TECHNOLOGY SHENZHEN CO ; INNOCOM TECHNOLOGY SHENZHEN CO LTD ; INNOLUX CORP**Inventor(s):** (std): ZHOU TONG ; ZHENG JIE JIAN ; LU JIAN HUI**Inventor(s):** LU, JIAN-HUI ; ZHENG, JIE-JIAN**Agent(s):** WEI TE CHUNG FOXCONN INT INC ; WEI TE**13) Family number: 42461812 (US2008278296A)**

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Title: POWER LINE COMMUNICATION APPARATUS, AND METHOD AND APPARATUS FOR CONTROLLING ELECTRIC DEVICES

Abstract: A power line communication apparatus, device control apparatus, and device control method are disclosed. By controlling the phase of AC power with reference to a zero cross point during power line communication, the power line communication apparatus enables not only data to be transmitted and received in a manner robust against noise and impedance but also the receiving end to be miniaturized. The power and operation of household devices can be controlled through the power line communication apparatus, thereby eliminating the need for separate communication networks when a remote control system is built in the home.

Classifications:**International (IPC 8-9):** G05B11/01 G08C19/16 H04B3/54

H04L12/10 H04L12/24 (Advanced/Invention);

H04B3/54 H04L12/10 H04L12/24 (Advanced/Non-invention);

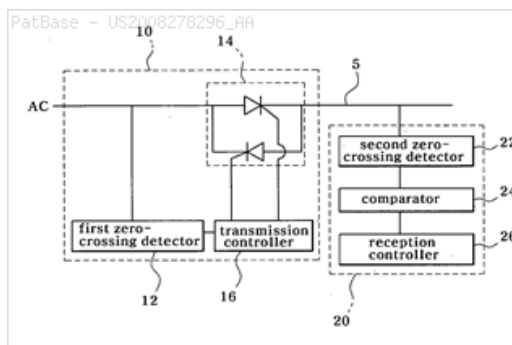
G05B11/01 H04B3/54 H04L12/10 H04L12/24 (Core/Invention)

CPC: H04B2203/542 H04B2203/5412 H04B2203/5441 H04B3/54

H04L12/10 H04L12/12

European: H04B3/54 T04B203/54M4 T04B203/54P6**US:** 340/12.32 340/12.35 340/12.350S 340/12.37 340/13.32 340/3.1

340/3.21 340/3.32 340/3.5 340/3.54 340/310.12 375/259 375/259P

**Family:**

Publication number	Publication date	Application number	Application date
EP1990929 A1	20081112	EP20080155654	20080505
KR101445181 B1	20141006	KR20080016968	20080225
KR20080099124 A	20081112	KR20080016968	20080225
US2008278296 AA	20081113	US20080151838	20080508
US8130085 BB	20120306	US20080151838	20080508

Priority:

KR20070044666 20070508 KR20080016968 20080225

Probable Assignee: FEELUX LIGHTING CO LTD**Assignee(s):** (std): FEELUX CO LTD ; NOH SI CHUNG**Assignee(s):** FEELUX LIGHTING CO LTD ; FEELUX CO**Inventor(s):** (std): NOH SI CHUNG**Agent(s):** MICHALSKI HUETTERMANN AND PARTNER PATENTANWALTE; FINNEGAN HENDERSON FARABOW GARRETT AND DUNN LLP; PL LAW GROUP PLLC**Designated states:** AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

Title: LIGHTING FIXTURE HAVING COMMUNICATION FUNCTION

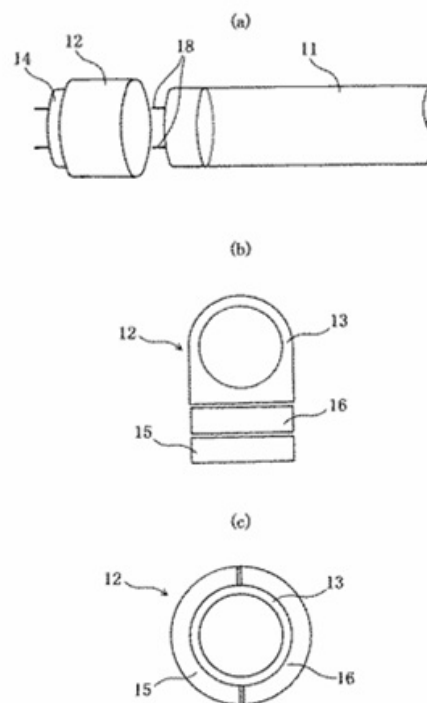
Abstract: PROBLEM TO BE SOLVED: To provide a lighting fixture which eliminates complicated or confused wiring by simplifying connections among various kinds of electronic equipment, reduces various faults such as radio interference, and further gives a communication function to existing lighting apparatus by only replacing an illumination light source. SOLUTION: A PLC adapter 16 serving as a repeater for power line communication between electrodes of an illumination light source 11 is mounted integrally with the lighting fixture, and power and a signal are divided at the part integral with the illumination light source 11. The illumination light source 11 is a light emitting diode illumination tube, a fluorescent tube, or an electric bulb. The PLC adapter 16 receives or transmits signals from or to various terminal apparatus for communication function or through a modulation circuit 17 and an antenna 24.

Classifications:**International (IPC 8-9):** F21V19/00 H04B3/54

H05B37/02 (Advanced/Invention);

F21V19/00 H04B3/54 H05B37/02 (Core/Invention)

PatBase - JP2009141766_A2

**Family:**

Publication number	Publication date	Application number	Application date
JP2009141766 A2	20090625	JP20070317239	20071207
JP5078581 B2	20121121	JP20070317239	20071207

Priority:

JP20070317239 20071207

Probable Assignee:

NAKAGAWA KENKYUSHO KK

Assignee(s): (std):

NAKAGAWA KENKYUSHO KK

Inventor(s): (std):

AOYANAGI NOBUO

15) Family number: 43653364 (US2011001626A)

Title: APPARATUS AND SYSTEM FOR LED STREET LAMP MONITORING AND CONTROL

Abstract: An LED street lamp including a PLC modem and a control circuit is disclosed. The LED street lamp is able to receive control commands from remote controller. It is also capable of doing self-control based on status information gathered by diagnostic circuit. A system for LED street lamp monitoring and control is also disclosed which includes a central controller, a distribution network and a plurality of LED street lamps. Based on the PLC technology, each LED street lamp can be centrally controlled by the central controller.

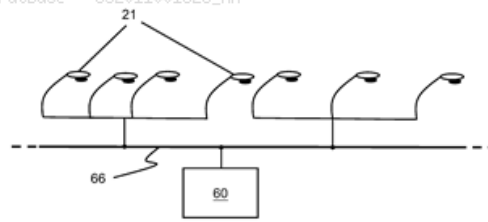
Classifications:**International (IPC 8-9):** G05B11/01 G08B21/00

H05B37/02 (Advanced/Invention);

H05B37/02 (Core/Invention)

CPC: H05B47/16 H05B47/185 H05B47/19 Y02B20/42**European:** H05B37/02B6P H05B37/02B6R H05B37/02B8 Y02B20/42 Y02B20/72**US:** 340/12.32 340/12.320S 340/310.11 340/635 340/635P

PatBase - US2011001626_AA

**Family:**

Publication number	Publication date	Application number	Application date
CN102017803 A	20110413	CN200980114261	20090223
EP2258148 A1	20101208	EP20090713184	20090223
US2011001626 AA	20110106	US20090918818	20090223
WO09103245 A1	20090827	WO2009C070504	20090223

Priority:

US20080030572P 20080222

US20090918818 20090223

WO2009CN070504 20090223

Probable Assignee: TRI CONCEPT TECHNOLOGY LTD**Assignee(s):** (std): TRI CONCEPT TECHNOLOGY LTD ; TSOI KING CHUNG VAMCO ; YIP CHAK LAM PETER**Assignee(s):** TRI CONCEPT TECHNOLOGY LIMITED**Inventor(s):** (std): PETER YIP CHAK LAM ; VAMCO TSOI KING CHUNG ; YIP CHAK LAM PETER ; TSOI KING CHUNG VAMCO**Agent(s):** SEVINC ERKAN; EAGLE IP LIMITED; EAGLE IP LTD; INSIGHT INTELLECTUAL PROPERTY LIMITED**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 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 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**16) Family number: 43956665 (US2011043124A)**

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Title: METHODS AND APPARATUS FOR ENCODING INFORMATION ON AN A.C. LINE VOLTAGE

Abstract: An AC line voltage may be encoded with control information, such as dimming information derived from an output signal of a conventional dimmer, so as to provide an encoded AC power signal. One or more lighting units, including LED-based lighting units, may be both provided with operating power and controlled (e.g., dimmed) based on the encoded power signal. In one implementation, information may be encoded on the AC line voltage by inverting some half-cycles of the AC line voltage to generate an encoded AC power signal, with the ratio of positive half-cycles to negative half-cycles representing the encoded information. In other aspects, the encoded information may relate to one or more parameters of the light generated by the LED-based lighting unit(s) (e.g., intensity, color, color temperature, etc.).

Classifications:**International (IPC 8-9):** G02F1/01 G05F1/00 H01L51/50 H04B3/54

H05B33/08 H05B37/02 H05B39/08 H05B41/24 (Advanced/Invention);

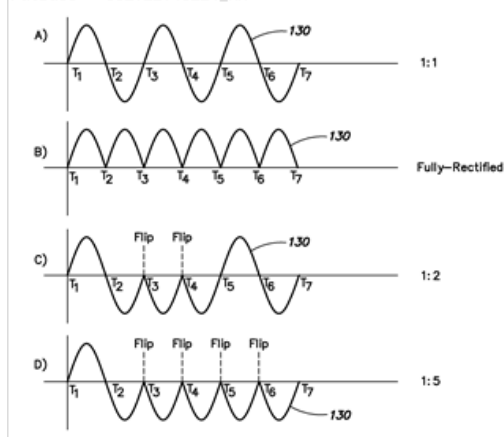
H04B3/54 H05B37/02 H05B39/08 (Advanced/Non-invention);

H05B33/02 H05B39/00 (Core/Invention)

CPC: H05B47/185 H05B45/10 H05B45/20 H05B45/37**European:** H05B37/02B6P**US:** 315/246 315/250 315/250P 315/265 315/291 315/294 315/294S

315/307 315/308 315/314

PatBase - US2011043124_HH

**Family:**

Publication number	Publication date	Application number	Application date
CN102017795 A	20110413	CN200980115579	20090421
CN102017795 B	20140305	CN200980115579	20090421
DE602009030666 D1	20150528	DE200960030666T	20090421
EP2277357 A1	20110126	EP20090738502	20090421
EP2277357 B1	20150415	EP20090738502	20090421
JP2011519468 T2	20110707	JP20110506802T	20090421
JP5777509 B2	20150909	JP20110506802T	20090421
KR101727093 B1	20170414	KR20107026812	20090421
KR20100135329 A	20101224	KR20107026812	20090421
RU2010148801 A	20120610	RU20100148801	20090421
RU2515609 C2	20140520	RU20100148801	20090421
US2011043124 AA	20110224	US20090989091	20090421
US8957595 BB	20150217	US20090989091	20090421
WO09133489 A1	20091105	WO2009IB51633	20090421

Priority:

US20080048986 20080430

US20080048986P 20080430

EP20090738502 20090421

WO2009IB51633 20090421

US20090989091 20090421

Probable Assignee: SIGNIFY HOLDING BV**Assignee(s):** (std): BLACKWELL MICHAEL KEENAN ; JOHNSTON SCOTT ; JOHNSTON SCOTT D ; KONINKLIJKE PHILIPS N V ; KONINKL PHILIPS ELECTRONICS NV ; ROYAL DUTCH PHILIPS ELECTRONICS LTD ; KONINKL PHILIPS NV**Assignee(s):** PHILIPS KONINKLL NV ; PHILIPS LIGHTING HOLDING BV ; SIGNIFY HOLDING BV ; KONINKLEJKE FILIPS EHEKTRONIKS NV ; PHILIPS ELECTRONICS N V KONINKLL ; PHILIPS ELECTRONICS KONINKLL NV ; KONINKLIJKE PHILIPS NV ; KONINKLIJKE PHILIPS ELECTRONICS N V**Inventor(s):** (std): BLACKWELL MICHAEL KEENAN ; JOHNSTON SCOTT ; JOHNSTON SCOTT D ; KEENAN BLACKWELL MICHAEL ; SCOTT JOHNSTON ; DZHONSTON SKOTT ; BLEHKUEHLL MAJKL KINAN**Inventor(s):** BLACKWELL MICHAEL KEENAN BRIARCLIFF MANOR ; JOHNSTON SCOTT BRIARCLIFF MANOR**Agent(s):** MEISSNER BOLTE AND PARTNER GBR; BEKKERS JOOST J J; BEKKERS JOOST JJ; PHILIPS INTELLECTUAL PROPERTY AND STANDARDS; YULIYA; DAMEN DANIEL M**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 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 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

Title: SYSTEMS AND METHODS FOR CALCULATING THE DELAY BETWEEN MEDIA SIGNALS

Abstract: The embodiments described herein provide a method and system for determining the extent to which a plurality of media signals are out of sync with each other. The method includes: receiving a first input media signal and a second input media signal wherein the first and second input media signals are in sync with each other; extracting at least one first characteristic feature from the first input media signal; extracting at least one second characteristic feature from the second input media signal; receiving a first output media signal and a second output media signal wherein the first output signal corresponds to the first input media signal after being transmitted through a network, and the second output signal corresponds to the second input media signal after being transmitted through the network; extracting the at least one first characteristic feature from the first output media signal; extracting the at least one second characteristic feature from the second output media signal; calculating a first signal delay based on the at least one first characteristic feature extracted from the first input and output media signals; calculating a second signal delay based on the at least one second characteristic feature extracted from the second input and output media signals; and outputting a synchronization signal based on the difference between the first and second delay signals wherein the synchronization signal represents the extent to which the first and second output media signals are out of sync with each other.

Classifications:

International (IPC 8-9): H04L29/06 H04N17/00 H04N21/242

H04N21/43 H04N5/04 H04N5/06 H04N7/16 H04N7/52

H04N9/64 (Advanced/Invention);

H04N17/00 H04N5/06 H04N7/16 H04N7/52 H04N9/64 (Core/Invention)

CPC: H04N5/04 H04N21/43 H04N5/85 H04N9/806 H04N21/6379

H04L65/601 H04L65/80 H04L29/06027 H04N21/42646 H04N21/4307

H04N21/4325 H04N21/6338 H04N21/6377 H04N21/658

European: H04N21/426D H04N21/432P H04N21/43S2 H04N21/6338

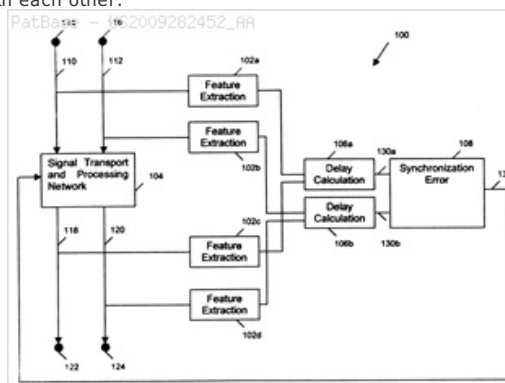
H04N21/6377 H04N21/6379 H04N21/658 H04N9/806 T04N5/85

US: 348/ E5.009 348/180 348/180P 348/500 348/512 348/515

348/518 348/E17.001 348/E17.001S 348/E5.009 370/468 375/130

375/135 375/224 375/227 375/354 386/201 386/248 709/203

709/231 709/233 725/118 725/118P



Family:

Publication number	Publication date	Application number	Application date
CA2665696 AA	20091107	CA20092665696	20090507
CA2665696 C	20161213	CA20092665696	20090507
US2009282452 AA	20091112	US20080116445	20080507
US2010201824 AA	20100812	US20100705217	20100212
US2010208079 AA	20100819	US20100705264	20100212
US8677437 BB	20140318	US20080116445	20080507
US8754947 BB	20140617	US20100705264	20100212
US8780209 BB	20140715	US20100705217	20100212

Priority:

US20080116445 20080507

US20100705217 20100212

US20100705264 20100212

Probable Assignee: EVERTZ MICROSYSTEMS LTD

Assignee(s): (std): EVERTZ MICROSYSTEMS LTD ; EVERTZ MICROSYSTEMS LTD ; WEI JEFF

Inventor(s): (std): WEI JEFF

Agent(s): BERESKIN AND PARR LLP SENCRL SRL

Title: ANTIPHASE CONTROLLER, AND ANTIPHASE ILLUMINATION CONTROL SYSTEM USING THE SAME

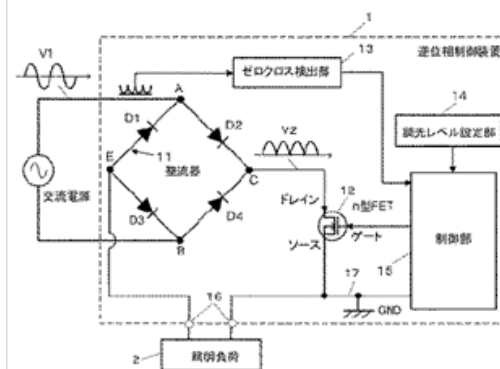
Abstract: PROBLEM TO BE SOLVED: To reduce the number of part items, to compactify a size and to reduce a cost, in an antiphase controller for illumination-controlling an illumination load, by antiphase-controlling an input voltage from an alternating current source. SOLUTION: This antiphase controller 1 is provided with a rectifier 11 for full-wave rectifying the alternating current voltage V1; an n-type FET 12 interposed between the rectifier 11 and the illumination load 2, and for controlling the continuity of a current flowing in the illumination load 2; a zero-cross detecting part 13 for detecting zero crossing of the full-wave rectified voltage; a dimming control level setting part 14 for setting a dimming control level of the illumination load 2; and a control part 15 for turning on and off the FET, at the timing of the zero cross, and for turning on and off the FET 12 at a fixed fringe angle, in response to the illumination control level. The illumination load 2 is thereby continuity-controlled in the antiphase control for the alternating current voltage V1 by the one switching element, and consequently, the number of part items is reduced to make the size small and to reduce the cost.

Classifications:

International (IPC 8-9): H05B37/02 (Advanced/Invention);

H05B37/02 (Core/Invention)

CPC: Y02B20/42

**Family:**

Publication number	Publication date	Application number	Application date
JP2010027406 A2	20100204	JP20080187920	20080718

Priority:

JP20080187920 20080718

Probable Assignee: PANASONIC ELEC WORKS CO LTD
Assignee(s): (std): PANASONIC CORP ; PANASONIC ELEC WORKS CO LTD
Assignee(s): PANASONIC ELECTRIC WORKS CO LTD
Inventor(s): (std): MURAKAMI YOSHINOBU ; TANIGAWA TETSUYA
Agent(s): ITAYA YASUO

19) Family number: 46625499 (US2010213759A)

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Title: DIGITAL SWITCH COMMUNICATION

Abstract: In one example, an electric circuit may be provided that is coupled to a line. The electric circuit may include a switch connected in series with a load, where the switch and the load are in series between two conductors of the line. The line may provide power to the load. The electric circuit may also include a resistive element connected in parallel with the switch and in series with the load. The switch may be configured to short circuit the resistive element when closed such that the voltage on the line varies between two voltage levels when the switch is opened and closed. The line provides power to the load when the switch is opened and when the switch is closed.

Classifications:

International (IPC 8-9): G05B11/01 G05F1/577 G06F1/26 G08B1/08 G08C19/16 H02J1/00 H02J1/08 H02J1/14 H02J13/00 H02J9/00 H03K7/08 H04B1/48 H04B3/54 H05B37/02 H05B41/36 (Advanced/Invention);

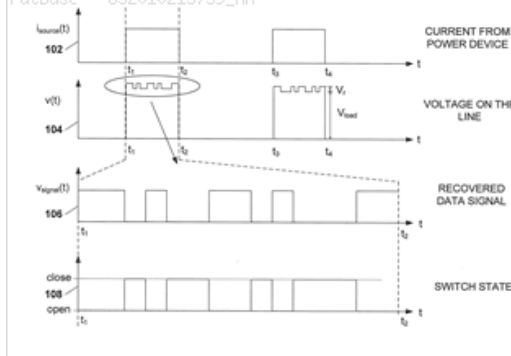
G05B11/01 H02J1/00 H02J9/00 H03K7/00 H04B3/54 (Core/Invention)

CPC: H05B41/3927 H05B47/185 H05B47/10 H05B45/10 H03K7/08 H04B3/54 H04B14/026 H04B2203/5416 G08C19/16 H04B3/542 H04B2203/547 Y10T307/74 Y10T307/937 Y10T307/944 H04B2203/5445 G05F1/577 H02J13/0003 H02J13/0096 H04B3/548 H04B2203/5441 H04B2203/545 Y02B20/48 Y10T307/313 Y10T307/367 Y10T307/406 Y10T307/658

European: H02J1/08 H02J1/14 H02J13/00E H03K7/08 H04B3/54A H05B41/392D8 T04B203/54S6 Y02B90/22H Y04S20/18

US: 1/1 307/1 307/112 307/139 307/140 307/154 307/19 307/19P 307/1P 307/26 307/31 307/31S 307/72 315/297 315/297P 320/101 34/12.32 34/12.33 34/12.37 34/3.1 34/538.11 34/538.15 34/568.2 34/870.02 340/12.16 340/12.32 340/12.33 340/12.35 340/12.37 340/3.1 340/310.12 340/310.120P 340/506 340/532 340/538 340/538.11 340/538.15 340/540 340/541 340/568.2 340/870.02 340/870.2 370/212 375/238 375/238S 700/295

PatBase - US2010213759_AA

**Family:**

Publication number	Publication date	Application number	Application date
CN102237680 A	20111109	CN201110115491	20110429
CN102237680 B	20150909	CN201110115491	20110429
EP2385603 A2	20111109	EP20110003568	20110502
EP2385603 A3	20131127	EP20110003568	20110502
EP2385603 B1	20190116	EP20110003568	20110502
US2010213759 AA	20100826	US20090536231	20090805
US2010214082 AA	20100826	US20090389868	20090220
US2010237695 AA	20100923	US20100790038	20100528
US2011241567 AA	20111006	US20100753376	20100402

US2012303173 AA	20121129	US20120568895	20120807
US2013154512 AA	20130620	US20130769550	20130218
US2013229268 AA	20130905	US20130859992	20130410
US2015069837 AA	20150312	US20140518267	20141020
US8207635 BB	20120626	US20090536231	20090805
US8248230 BB	20120821	US20100790038	20100528
US8390441 BB	20130305	US20120568895	20120807
US8427300 BB	20130423	US20090389868	20090220
US8890663 BB	20141118	US20130859992	20130410
US8890679 BB	20141118	US20130769550	20130218
US9583979 BB	20170228	US20140518267	20141020

Priority:

US20090389868 20090220 US20090536231 20090805 US20100753376 20100402
US20100330536P 20100503 US20100790038 20100528 US20120568895 20120807
US20130769550 20130218 US20130859992 20130410 US20140518267 20141020

Probable Assignee: COMMScope TECHNOLOGIES LLC

Assignee(s): (std): REDWOOD SYSTEMS INC ; COVARO MARK ; LEONARD DAVE

Assignee(s): JPMORGAN CHASE BANK NA COLLATERAL AGENT AS ; WILMINGTON TRUST NATIONAL ASSOCIATION COLLATERAL AGENT AS ; JPMORGAN CHASE BANK NA ; ALLEN TELECOM LLC ; ANDREW LLC ; COMMScope INC OF NORTH CAROLINA ; COMMScope TECHNOLOGIES LLC

Inventor(s): (std): MARK COVARO ; DAVE LEONARD ; LEONARD DAVID ; YOUNES AMRO A ; HENIG ROBERT ; COVARO MARK ; LEONARD DAVE

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; INDIANAPOLIS OFFICE 27879, BRINKS HOFFER GILSON AND LIONE; INDIANAPOLIS OFFICE 27879 BRINKS HOFFER GILSON AND LIONE; BRINKS HOFFER GILSON AND LIONE; MYERS BIGEL SIBLEY AND SAJOVEC PA; MYERS BIGEL PA

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

20) Family number: 46833853 (RU2390933C)

© PatBase

Title: METHOD OF ADDRESS TRANSMISSION OF INFORMATION VIA AC POWER LINES

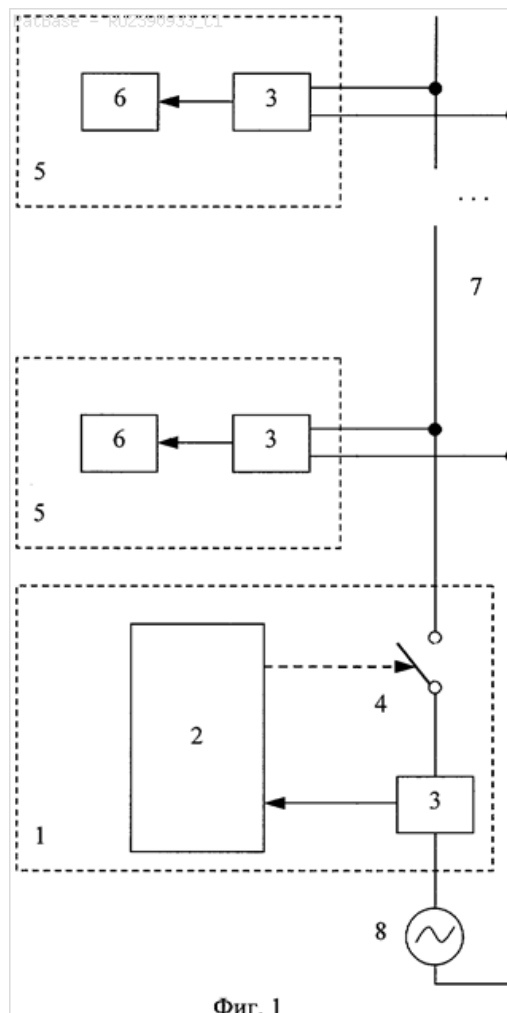
Abstract: FIELD: electricity. SUBSTANCE: in the method at the beginning of the line there arranged is transmitter consisting of microprocessor unit, zero crossing moment detector of the main harmonics of supply voltage and controlled switching device which can interrupt supply of supply voltage to the line for the period equal to the half of the period of the main harmonic of supply voltage with the beginning at the zero crossing point of the main harmonics, along the line there arranged is many receivers, each of which consists of microcontroller to which there connected is zero crossing moment detector of the main harmonics of supply voltage, each receiver has its own serial number (unique identifier of the receiver), the transmitted information is coded with sequence of symbols of the pre-determined alphabet. At that, each serial number in alphabet (symbol code) corresponds to each symbol. Then the obtained sequence of symbols are formed into packs of fixed length, each pack consists of receiver identifier field and fixed number of numeric fields, to each numeric field there recorded is the appropriate symbol code of the transmitted sequence. Then the pack is transmitted via electric power lines, invention differs by the fact that the first interruption of supply voltage (the beginning marker) corresponds to the beginning of the pack, then value of receiver identifier field is coded by supply to the line of the appropriate number of semi-waves of supply voltage, after that there is the second interruption of supply voltage (field separator). Then value of the second pack field is coded by supply to the line of the number of semi-waves of supply voltage, which corresponds to symbol code, after that there transmitted is the third field separator and then in the same way there transmitted are the following pack fields, receiver determines moments of supply voltage interruption by no pulses received from zero crossing moment detector, microprocessor of the receiver calculates the number of semi-waves of the main voltage harmonics, which passed between interruptions. Then to the number of semi-waves calculated in each pack field there assigned as to the code value is symbol of the specified alphabet, and so the transmitted pack is restored, if the received identifier is not equal to the receiver proper identifier, the pack is ignored, after the pack is received, all the receivers are switched to the condition of awaiting the beginning marker of the next pack. EFFECT: possibility of address direction of information and structuring the transmitted data. 3 dwg

Classifications:

International (IPC 8-9): H02J13/00 H04B3/54 (Advanced/Invention);
H02J13/00 H04B3/54 (Core/Invention)

CPC: Y04S40/146 Y02E60/7892

European: Y04S40/14D



Family:

Publication number	Publication date	Application number	Application date
RU2008138801 A	20100410	RU20080138801	20080929
RU2390933 C1	20100527	RU20080138801	20080929

Priority:

RU20080138801 20080929

Probable Assignee: OOO NPF EHLEKTRONNYE INF SISTE

Assignee(s): (std): LIABILITY COMPANY LTD ; OOO NPF EHLEKTRONNYE INF SISTE

Assignee(s): OBSHCHESTVO S OGRANICHENNOJ OTVETSTVENNOST JU NAUCHNO PROIZVODSTVENNAJA
EHLEKTRONNYE INFORMATSIONNYE SISTEMY FA ; OBSHCHESTVO S OGRANICHENNOJ
OTVETSTVENNOST JU NAUCHNO PROIZVODSTVENNAJA FIRMA EHLEKTRONNYE INFORMATSIONNYE
SISTEMY

Inventor(s): (std): VERESHCHAGIN GENNADIJ REDZHINAL DOVICH ; STARCHENKO IVAN EVGEN EVICH ; NIKULICHEV ALEKSANDR JUR EVICH ; TOLSTENEV ALEKSANDR EVGEN EVICH ; SAPRONOV ANDREJ ANATOL EVICH ; GALATOVA IRINA EVGEN EVNA ; LESHCHENKO ANTON GENNAD EVICH

Inventor(s): STARCHENKO IVAN EVGEN'EVICH ; TOLSTENEV ALEKSANDR EVGEN'EVICH ; LESHCHENKO ANTON GENNAD'EVICH ; VERESHCHAGIN GENNADIJ REDZHINAL'DOVICH ; SAPRONOV ANDREJ ANATOL'EVICH ; GALATOVA IRINA EVGEN'EVNA ; NIKULICHEV ALEKSANDR JUR'EVICH

21) Family number: 47096201 (WO10117340A1)

Title: POWER LINE CARRIER DATA SYSTEMS AND METHODS

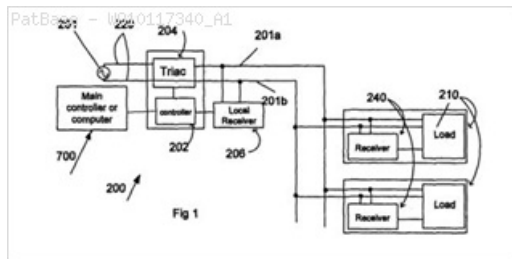
Abstract: Systems and methods for transmitting control data over alternating current (ac) power lines. The system may include a transmitter including: a zero crossing detector; a microprocessor; and a triode for alternating current (Triac) or a silicon-controlled rectifier (SCR) triggering device; wherein said transmitter receives the control data from a data source; and said microprocessor splits said control data into a plurality of elements, provides a fixed time delay for each of said elements and transmits each of said elements to said Triac or SCR triggering device, which is capable of triggering a corresponding Triac or SCR connected to said ac power line when said zero crossing detector detects a zero crossing of a supply voltage of said ac power line.

Classifications:

International (IPC 8-9): H04B3/54 (Advanced/Invention)

CPC: H04B3/54 H04B2203/5412 H04B2203/542 H05B47/185

European: H04B3/54 T04B203/54M4 T04B203/54M8



Family:

Publication number	Publication date	Application number	Application date
SG166007 A1	20101129	SG20090023888	20090407
SG176548 A1	20120130	SG20110073822	20100407
WO10117340 A1	20101014	WO2010SG00138	20100407

Priority:

SG20090023888 20090407 SG20090002497 20090413 WO2010SG00138 20100407
SG20110073822 20100407

Probable Assignee: POWER LINK TECHNOLOGY PTE LTD

Assignee(s): (std): AH HONG KHET ; POWER LINK TECHNOLOGY PTE LTD

Inventor(s): (std): HONG KHET AH ; AH HONG KHET

Agent(s): ELLA CHEONG SPRUSON AND FERGUSON SINGAPORE PTE LTD

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 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 TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

22) Family number: 48093133 (US2011082599A)

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Title: OPTIMIZING UTILITY USAGE BY SMART MONITORING

Abstract: A system for optimizing utility usage is described. The system comprises a monitoring device adapted to be connected to a utility point, a utility consuming device and a central processing unit (CPU). The monitoring device is configured to regulate utility usage information of the utility consuming device and is further configured to assign a unique identifier to the monitoring device. The monitoring device comprises a measurement circuit for measuring utility usage information, wherein the measurement circuit is coupled to the utility point. The monitoring device is configured to communicate with the CPU, wherein the monitoring device is configured to transmit utility usage information of the utility consuming device to the CPU on the unique identifier and wherein the monitoring device is configured to receive utility usage information of the utility consuming device and wherein the CPU is configured to process the utility usage information based on the unique identifier.

Classifications:

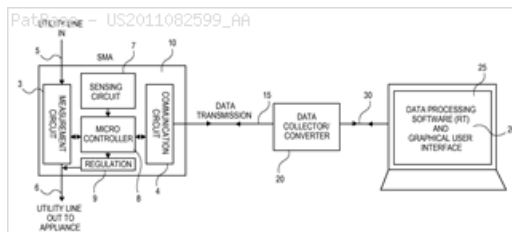
International (IPC 8-9): G01D4/00 G01R21/00 G06F1/28 G06F17/00 G06F19/00 (Advanced/Invention)

International (IPC 1-7): G01D4/00 G06F17/00

CPC: H02J13/0003 Y02B90/228 Y04S20/18

European: H02J13/00E Y02B90/22H Y04S20/18

US: 700/295 700/295P 700/90 700/90S 702/45 702/45S 702/62 702/62S



Family:

Publication number	Publication date	Application number	Application date
IN02777MU2010 A	20110107	IN2010MU02777	20101006
US2011082599 AA	20110407	US20100899488	20101006

Priority:

US20090249237P 20091006 US20100899488 20101006

Probable Assignee: BRISKO WILLIAM

Assignee(s): (std): BRISKO WILLIAM ; SHINDE MAKARAND ; SHINDE NITU

Assignee(s): MAKARAND SHINDE

Inventor(s): (std): SHINDE NITU ; BRISKO WILLIAM ; SHINDE MAKARAND

Inventor(s): WILLIAM BRISKO ; MAKARAND SHINDE ; NITU M SHINDE

23) Family number: 50014779 (US2011291583A)

© PatBase

Title: DIMMER CIRCUIT APPLICABLE FOR LED DEVICE AND CONTROL METHOD THEREOF

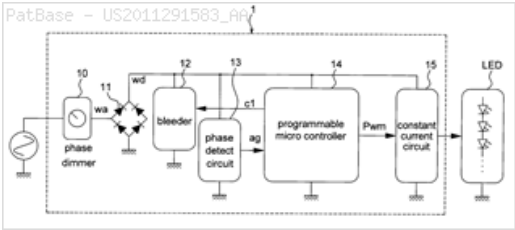
Abstract: A dimmer circuit applicable for LED device and control method thereof is disclosed in the embodiments of the present invention. The dimmer circuit is applicable for controlling at least a LED device. The dimmer circuit includes a rectifier, a bleeder, a phase angle detect circuit, a constant current circuit and a programmable micro controller. The phase angle detect circuit couples to the programmable micro controller. The constant current circuit couples to the LED device. The programmable micro controller generates a PWM signal according to the output signal of the phase angle detect circuit to adjust current of the constant current circuit.

Classifications:

International (IPC 8-9): H05B37/02 H05B41/16 (Advanced/Invention)

CPC: H05B45/10 H05B45/37 H05B47/185

European: H05B33/08D1C4 H05B33/08D3B H05B37/02B6P
US: 315/200R 315/287 315/287P 315/307



Family:

Publication number	Publication date	Application number	Application date
TW201146087 A	20111216	TW20100146213	20101228
TWI434616 B	20140411	TW20100146213	20101228
US2011291583 AA	20111201	US20110095260	20110427
US8508147 BB	20130813	US20110095260	20110427

Priority:

TW20100117507 20100601 TW20100146213 20101228

Probable Assignee: JD TEK JIM DANDY TECHNOLOGY CORP

Assignee(s): (std): JD TEK JIM DANDY TECHNOLOGY CORP ; SHEN FENG MIN ; UNITED POWER RES TECHNOLOGY CORP

Assignee(s): UNITED POWER RESEARCH TECHNOLOGY CORP

Inventor(s): (std): SHEN FENG MIN

Agent(s): MUNCY GEISSLER OLDS AND LOWE PLLC

24) Family number: 50933745 (US2012091915A)

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Title: POWER LINE COMMUNICATION METHOD AND APPARATUS FOR LIGHTING CONTROL

Abstract: A transmitter apparatus and a ballast/driver receiver apparatus are presented for transmitting control information through a lighting system power line connection to a ballast or driver in which the transmitter selectively interrupts power delivery in select AC line power cycles to indicate data of a first binary state an uninterrupted power cycles indicate a second binary state with the receiver decoding the message data bits of different binary states based at least partially on the interruptions.

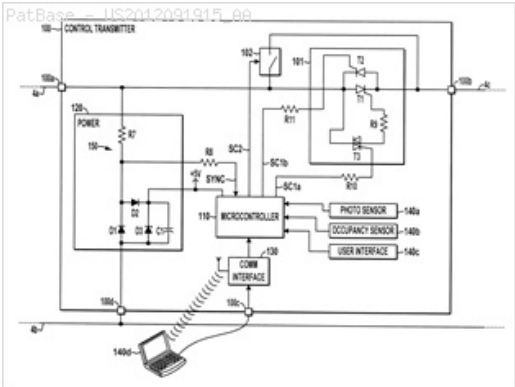
Classifications:

International (IPC 8-9): H05B37/02 H05B41/36 (Advanced/Invention)

CPC: H05B47/185

European: H05B37/02B6P

US: 315/291 315/307 315/307P 315/308



Family:

Publication number	Publication date	Application number	Application date
US2012091915 AA	20120419	US20100907549	20101019
US8587223 BB	20131119	US20100907549	20101019
WO12054137 A1	20120426	WO2011US49259	20110826

Priority:

US20100907549 20101019

Probable Assignee: CURRENT LIGHTING SOLUTIONS LLC F K A GE LIGHTING SOLUTIONS LLC

Assignee(s): (std): GEN ELECTRIC ; ILYES LASZLO SANDOR ; TRACY DAVID JOSEPH

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY ; ALLY BANK COLLATERAL AGENT AS ; CURRENT LIGHTING SOLUTIONS LLC F K A GE LIGHTING SOLUTIONS LLC

Inventor(s): (std): ILYES LASZLO SANDOR ; TRACY DAVID JOSEPH

Agent(s): FAY SHARPE LLP; DIMAURO PETER T 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 QA RO RS RU 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

25) Family number: 51087266 (US8179231B)

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Title: TRANSMISSION DELAY BASED RFID TAG

Abstract: A chipless RFID tag system having a transmitter sending an input signal and a tag substrate. The tag substrate has at least one microstrip and the microstrip has a first portion with a first impedance and a second portion with a second impedance different from the first impedance. The system further includes a receiver detecting at least two reflections from

an interface of the first and second impedances and identifying relative time domain positions of the reflections to one another.

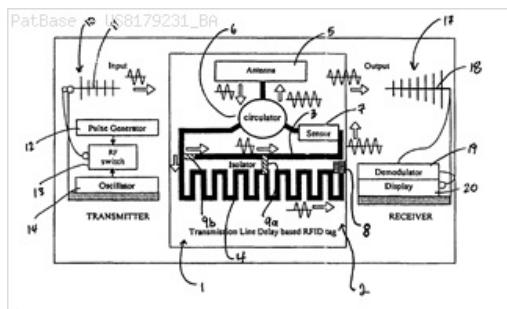
Classifications:

International (IPC 8-9): G06K19/06 G08B13/14 H04Q5/22 H05K3/02 (Advanced/Invention)

CPC: G06K19/0672 G01N27/227 G01N33/0047 H04Q9/00 H04Q2209/47 Y10T29/49155 H04Q2213/13095

European: G06K19/067Q

US: 235/492 29/846 340/10.1 340/539.26 340/539.27 340/572.1 340/572.5 340/572.7 340/572.9



Family:

Publication number	Publication date	Application number	Application date
US8179231 BA	20120515	US20070864159	20070928
US8736452 BA	20140527	US20080048019	20080313

Priority:

US20060827249P 20060928 US20070864159 20070928 US20080048019 20080313

Probable Assignee: LOUISIANA TECH RESEARCH CORP

Assignee(s): (std): AGARWAL MANGILAL ; BALACHANDRAN MERCYMA DEE ; CHAMARTI ARAVIND ; LOUISIANA TECH RES FOUNDATION ; RAMISETTI SIREESHA ; VARAHRAMYAN KHODADAD ; SHRESTHA SUDHIR ; VEMAGIRI JEEVAN KUMAR ; LOUISIANA TECH UNIV RES FOUNDATION A DIVISION OF LOUISIANA TECH UNIV FOUNDATION INC

Assignee(s): LOUISIANA TECH RESEARCH CORP ; LOUISIANA TECH RESEARCH FOUNDATION ; LOUISIANA TECH UNIV RESEARCH FOUNDATION A DIVISION ; LOUISIANA TECH UNIV RESEARCH FOUNDATION A DIVISION OF LOUISIANA TECH UNIV FOUNDATION INC

Inventor(s): (std): CHAMARTI ARAVIND ; AGARWAL MANGILAL ; SHRESTHA SUDHIR ; RAMISETTI SIREESHA ; VEMAGIRI JEEVAN KUMAR ; VARAHRAMYAN KHODADAD ; BALACHANDRAN MERCYMA DEE

Agent(s): JONES WALKER WAECHTER POITEVENT CARRERE AND DENEGRE LLP; JONES WALKER LLP

26) Family number: 5216135 (US5166549A)

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Title: Zero-voltage crossing detector for soft-switching devices

Abstract: A zero-voltage crossing detector includes a transistor circuit in combination with comparator circuitry for determining when the voltage across a soft-switching device crosses zero. The transistor circuit includes a series combination of a detector transistor and a source, or emitter, load resistance coupled across the soft-switching device. The gate, or base, of the transistor is coupled via a resistive voltage divider to a dc supply. The source, or emitter, of the transistor is coupled to the comparator circuitry for comparing the voltage across the load resistance to a zero-voltage reference. During intervals when the voltage across the soft-switching device is greater than the input voltage to the detector transistor, the detector transistor is off, causing the output of the transistor circuit to equal the input voltage. Otherwise, the detector transistor is active and the output voltage equals the voltage across the soft-switching device, so that the comparator circuitry generates signals to indicate the zero-voltage crossings.

Classifications:

International (IPC 8-9): G01R19/175 H02M1/08 H02M7/48 H03K5/1536 (Advanced/Invention);

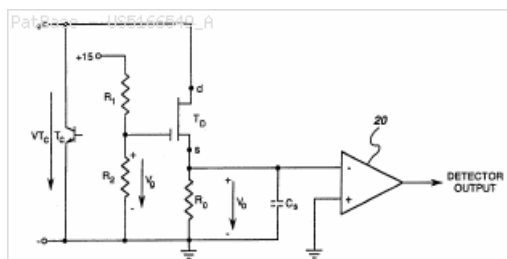
G01R19/175 H02M1/08 H02M7/48 H03K5/153 (Core/Invention)

International (IPC 1-7): H03K17/13 H03K5/153

CPC: G01R19/175 H02M1/083 H02M7/4826 H03K5/1536

European: G01R19/175 H02M1/08C H02M7/48R H03K5/1536

US: 307/354 307/362 323/235 327/78 327/79 363/89 363/97



Family:

Publication number	Publication date	Application number	Application date
US5166549 A	19921124	US19910741694	19910807

Priority:

US19910741694 19910807

Probable Assignee: GEN ELECTRIC

Assignee(s): (std): GEN ELECTRIC

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY

Inventor(s): (std): DEDONCKER RIK W A A

27) Family number: 52529229 (US2012306287A)

© PatBase

Title: POWER SUPPLY APPARATUS AND METHOD FOR WIRELESS POWER TRANSMISSION

Abstract: Provided is an apparatus and method that may stably perform wireless transmission. According to one general aspect, a power supply for a wireless power transmitter may include: a detecting unit configured to detect voltage, current, or both supplied to a power amplifier (PA); a controller configured to determine power supplied to the PA based on the detected voltage, the detected current, or both, and to determine a reference current based on the determined power supplied to the PA; and a breaker configured to cut off the power supplied to the PA based on a comparison of current supplied to the PA and the reference current.

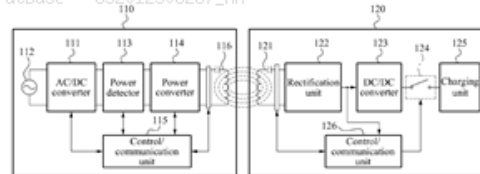
Classifications:

International (IPC 8-9): B60L11/18 H01F37/00 H02J17/00 H02J5/00 H02J50/00 H02J50/12 H02J50/70 H02J50/80 H02J7/02 (Advanced/Invention)

CPC: B60L53/36 B60L2210/10 B60L2210/30 B60L2210/40 B60L2250/16 Y02T10/7005 Y02T10/7072 Y02T10/7216 Y02T10/7241 Y02T90/12 Y02T90/121 Y02T90/122 Y02T90/125 Y02T90/127 Y02T90/14 H02J50/12 H02J50/70 H02J50/80 B60L53/122 B60L53/126 H02J5/005 H02J7/025 B60L53/12

US: 1/1 307/104

PatBase - US2012306287_AA

**Family:**

Publication number	Publication date	Application number	Application date
KR101971998 B1	20190424	KR20120055764	20120525
KR20120135050 A	20121212	KR20120055764	20120525
US2012306287 AA	20121206	US20120486005	20120601
US2016294226 AA	20161006	US20160177732	20160609
US9369007 BB	20160614	US20120486005	20120601
US10199883 BB	20190205	US20160177732	20160609

Priority:

KR20110053190 20110602 US20120486005 20120601 US20160177732 20160609

Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): CHOI JIN SUNG ; KIM NAM YUN ; KWON SANG WOOK ; PARK YUN KWON ; SAMSUNG ELECTRONICS CO LTD

Assignee(s): SAMSUNG ELECTRONICS CO

Inventor(s): (std): CHOI JIN SUNG ; KIM NAM YUN ; PARK YUN KWON ; KWON SANG WOOK

Agent(s): NSIP LAW; SUGHRUE MION PLLC

28) Family number: 56884079 (US2014191574A)

© PatBase

Title: VIRTUAL PARALLEL LOAD BANK SYSTEM

Abstract: A virtual parallel load bank system is characterized by a load bank connected in parallel with the source terminals of a voltage source to create a specific current to be applied to the terminals. The load bank includes a plurality of loads that are selectively connected in accordance with the desired current for the voltage source. One load device is designated as a master load and a communication network is connected with the load devices to enable the master load device to communicate with the other load devices to determine which are available for connection in the virtual load bank system.

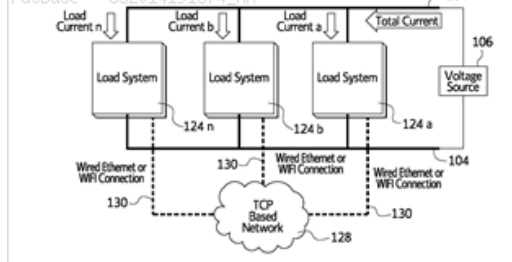
Classifications:

International (IPC 8-9): H02J4/00 (Advanced/Invention)

CPC: G01R31/40 Y10T307/461

US: 307/38

PatBase - US2014191574_AA

**Family:**

Publication number	Publication date	Application number	Application date
US2014191574 AA	20140710	US20130737262	20130109

Priority:

US20130737262 20130109

Probable Assignee: EXPERIUM TECHNOLOGIES LLC

Assignee(s): (std): EXPERIUM TECHNOLOGIES LLC

Inventor(s): (std): PALATINI LANCE

29) Family number: 57355047 (US2014254200A)

© PatBase

Title: HIGH RESOLUTION RECTIFIER SUITABLE FOR LOW VOLTAGE SIGNALS

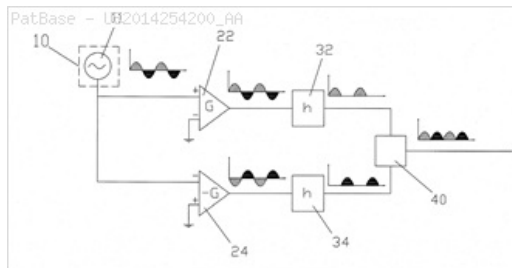
Abstract: A high resolution rectifier suitable for low voltage signals includes a signal input end connected to a signal source for inputting an original AC current; two amplifiers; one receiving the original AC current from a positive end; and the other receiving the AC current from a negative end; amplification factors of the two amplifiers being reversed to each other; two half wave rectifiers each connected to a respective amplifier selected from the two amplifiers; each half wave rectifier receiving an output from the respective amplifier and removing negative half parts of the input current; and an adder connected to the two half wave rectifiers for adding outputs from the two half wave rectifiers so as to full-wave rectifying of the original AC current.

Classifications:

International (IPC 8-9): H02M7/12 (Advanced/Invention)

CPC: H02M2001/0009 H05B45/24

US: 363/13



Family:

Publication number	Publication date	Application number	Application date
US2014254200 AA	20140911	US20130784843	20130305

Priority:

US20130784843 20130305

Probable Assignee:

KUO KUEI WEI

Assignee(s): (std):

KUO KUEI WEI

Inventor(s): (std):

KUO KUEI WEI

30) Family number: 58738134 (JP2015039248A)

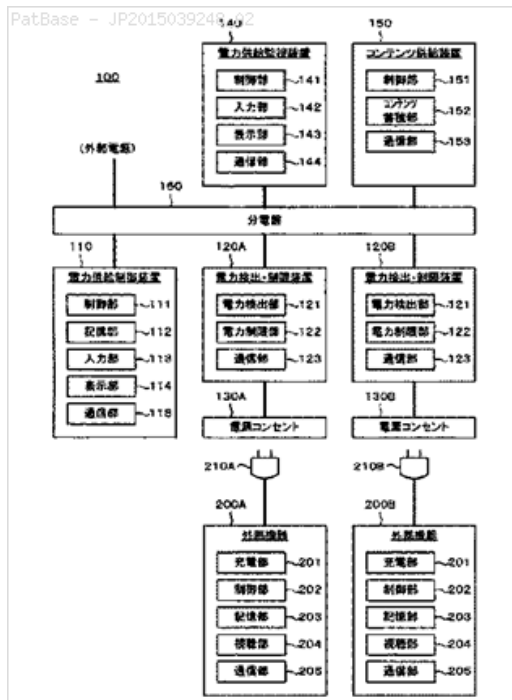
© PatBase

Title: POWER SUPPLY CONTROL DEVICE AND POWER SUPPLY SYSTEM

Abstract: PROBLEM TO BE SOLVED: To provide a power supply control device and a power supply system which control power supply according to authenticity of an external apparatus. SOLUTION: A power supply system comprises: a power supply unit which supplies power to an external apparatus; a power detection unit which detects increase of power supply from the power supply unit; an authentication unit which authenticates the external apparatus according to detection by the power detection unit; a determination unit which determines propriety of power supply to the external apparatus on the basis of a result of the authentication; and a power restriction unit which restricts power supply from the power supply unit on the basis of the determination.

Classifications:

International (IPC 8-9): H01M10/44 H02J1/00 H02J13/00 H02J3/00 H04B3/54 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
JP2015039248 A2	20150226	JP20090295287	20091225

Priority:

JP20090295287 20091225

Probable Assignee:

TOSHIBA CORP

Assignee(s): (std):

TOSHIBA CORP

Assignee(s):

TOSHIBA KK

Inventor(s): (std):

ARAKI KATSUHIKO

31) Family number: 58999692 (US2015102739A)

© PatBase

Title: LIGHTING DEVICE

Abstract: A system is described for providing unconditioned power using an alternating current (AC) power source in order

to power light emitting diodes (LEDs). The system may include a plurality of light emitting diodes (LEDs), a microprocessor to send pulse-width modulated power signals to power the plurality of LEDs, a zener diode to limit a voltage provided to the microprocessor from the AC power source, and a varistor in series with the zener diode to clamp down the voltage from the AC power source to a pre-defined value to resist current in rush to the microprocessor.

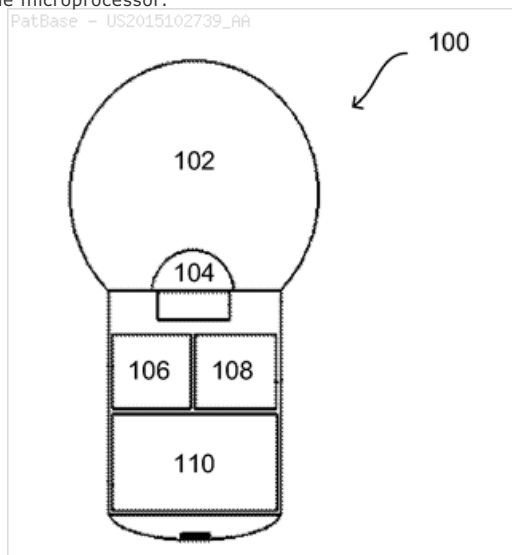
Classifications:

International (IPC 8-9): H02H3/10 H02H9/04 H05B33/08

H05B41/28 (Advanced/Invention)

CPC: H02H3/10 H02H9/04 H02H9/042 H05B45/00 H05B45/20 H05B45/37

US: 1/1 315/200R 315/246



Family:

Publication number	Publication date	Application number	Application date
US2015102739 AA	20150416	US20130055756	20131016
US9161398 BB	20151013	US20130055756	20131016

Priority:

US20130055756 20131016

Probable Assignee: ILIGHT LLC

Assignee(s): (std): ILIGHT LLC

Inventor(s): (std): MILLAR GARY BRET ; WISCOMBE JOSHUA JAMES

Agent(s): THORPE NORTH AND WESTERN

32) Family number: 59225170 (US2015130598A)

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Title: POWER LINE COMMUNICATION CONTROL SYSTEM ADAPTED FOR SINGLE-WIRE AND METHOD THEREOF

Abstract: A power line communication control system adapted for single-wire and method thereof are provided in the present invention. The power line communication control method adapted for single-wire includes: receiving a AC voltage from a AC power wire, wherein each period of the AC voltage includes a positive half cycle and a negative half cycle to form a sinusoidal AC signal; and adjusting the positive half cycle and the negative half cycle of the sinusoidal AC signal according to a digital data to be transmit to a load circuit. The step of adjusting the positive half cycle and the negative half cycle of the sinusoidal AC signal includes removing a first component of the positive half cycle of the sinusoidal AC signal and a second component of the negative half cycle of the sinusoidal AC signal to obtain a phase cutting signal. When the digital data is a first logic, the positive half cycle of the phase cutting signal is equal to the negative half cycle of the phase cutting signal. When the digital data is a second logic, the positive half cycle of the phase cutting signal is not equal to the negative half cycle of the phase cutting signal.

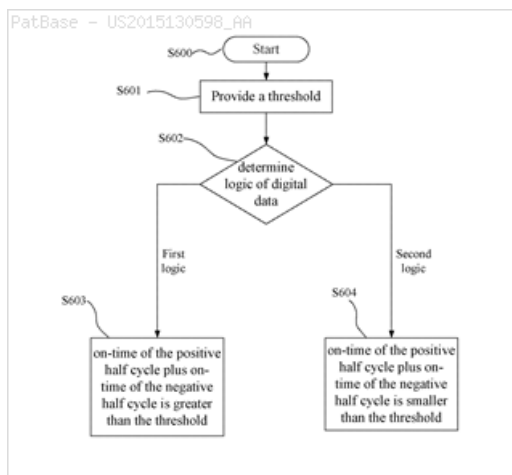
Classifications:

International (IPC 8-9): G08C19/00 H02J13/00

H04B3/54 (Advanced/Invention)

CPC: H04B3/542 H04B2203/5412

US: 1/1 340/12.32



Family:

Publication number	Publication date	Application number	Application date
TW201519553 A	20150516	TW20130140724	20131108
TWI545865 B	20160811	TW20130140724	20131108
US2015130598 AA	20150514	US20140536022	20141107
US9276633 BB	20160301	US20140536022	20141107

Priority:

Probable Assignee: NATIONAL FORMOSA UNIV
Assignee(s): (std): UNIV NAT FORMOSA
Assignee(s): NATIONAL FORMOSA UNIV
Inventor(s): (std): CHEN YU KAI ; CHANG CHIN HSIUNG
Agent(s): MUNCY GEISSLER OLDS AND LOWE PC

33) Family number: 63714764 (US2017271927A)

© PatBase

Title: WIRELESS POWER TRANSMISSION SYSTEM AND POWER TRANSMISSION APPARATUS

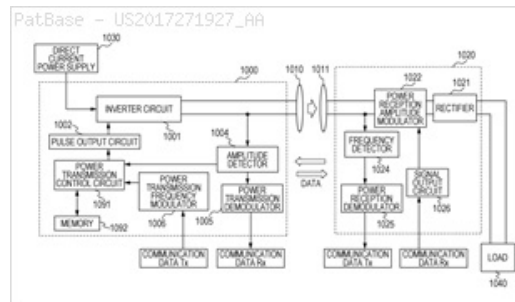
Abstract: A power transmission apparatus includes an inverter circuit, a power transmission antenna that wirelessly transmits alternating current power output from the inverter circuit, and a power transmission control circuit that causes the inverter circuit to output the alternating current power. The power transmission control circuit causes the inverter circuit to output the alternating current power as binary communication data by varying frequency of the alternating current power output from the inverter circuit between a first frequency and a second frequency, and performs amplitude control for eliminating a difference between amplitude of voltage of the alternating current power at a time when the frequency is the first frequency and amplitude of the voltage of the alternating current power at a time when the frequency is the second frequency.

Classifications:

International (IPC 8-9): H01Q5/20 H02J50/00 H02J50/10 H02J50/12 H02J50/80 H04B5/00 H04B5/02 (Advanced/Invention)

CPC: H02J50/12 H02J50/80 H04B5/0031 H04B5/0037 H04B5/0081 H04B5/02 H02J50/00

US: 1/1 375/130

**Family:**

Publication number	Publication date	Application number	Application date
■ CN106797140 A	20170531	CN201680003144	20160205
■ DE602016024040 D1	20191128	DE201660024040T	20160205
■ EP3349328 A1	20180718	EP20160843861	20160205
■ EP3349328 A4	20180919	EP20160843861	20160205
■ EP3349328 B1	20191106	EP20160843861	20160205
■ IN201747020867 A	20170630	IN201747020867	20170615
■ JP2017055591 A2	20170316	JP20150178556	20150910
■ JP2017055641 A2	20170316	JP20160156492	20160809
■ JP5995022 B1	20160921	JP20150178556	20150910
■ JP6604554 B2	20191113	JP20160156492	20160809
■ US2017271927 AA	20170921	US20170614735	20170606
■ US2018131237 AA	20180510	US20180867250	20180110
■ US9906077 BB	20180227	US20170614735	20170606
■ US10298070 BB	20190521	US20180867250	20180110
■ WO17042987 A1	20170316	WO2016JP00599	20160205

Priority:

JP20150178556 20150910 EP20160843861 20160205 WO2016JP00599 20160205
 JP20160156492 20160809 US20170614735 20170606 US20180867250 20180110

Probable Assignee: PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO LTD**Assignee(s):** (std): PANASONIC IP MAN CO LTD ; PANASONIC IP MAN CORP

Assignee(s): PANASONIC IP MANAGEMENT CO LTD ; PANASONIC IP MANAGEMENT CORP ; PANASONIC IP MANAGEMENT CO ; PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO LTD ; PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO LTD OSAKA SHI

Inventor(s): (std): SUGANO HIROSHI ; KANNO HIROSHI ; SAKATA TSUTOMU

Agent(s): GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; OKUDA SEIJI; RENNER OTTO BOISSELLE AND SKLAR LLP; KAMATA KENJI ET AL

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 IR IS IT 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 SA 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

34) Family number: 63734394 (US2016302274A)

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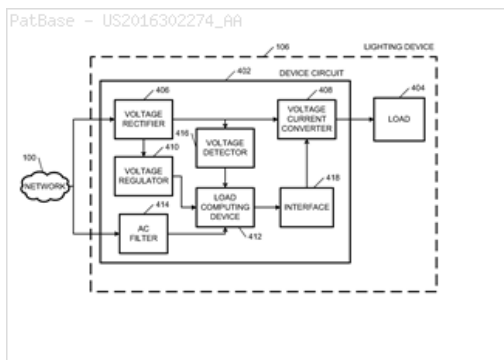
Title: SYSTEMS AND METHODS FOR CUSTOMIZED LOAD CONTROL

Abstract: Included are embodiments for customized load control. One embodiment of a method includes receiving altered alternating current power, where the altered alternating current power is altered via inclusion of a delay to communicate a message, converting the message in the altered alternating current power into a computer-readable format, and determining an action to take related to the message. Some embodiments include utilizing the altered alternating current power for performing the action, based on the message.

Classifications:

International (IPC 8-9): G05B G05B11/01 G05B15/02 G05D G05D1/02 G05F1/66 H02M H02M3/338 H04B3/54 H05B H05B33/08

H05B37/02 H05B47/00 (Advanced/Invention);
G05D1/02 (Core/Invention);
H05B (Subclass/Invention)
CPC: G05F1/66 H04B2203/5412 H04B2203/542 G05B15/02
H04B3/542 H05B45/00 H05B47/185 H04B3/54
US: 1/1 315/200R 315/246



Family:

Publication number	Publication date	Application number	Application date
AU2016246731 AA	20171109	AU20160246731	20160407
AU2016246731 AB	20171130	AU20160246731	20160407
AU2020200673 AA	20200220	AU20200200673	20200130
BR112017021616 A2	20180703	BR20171121616	20160407
CA2982122 AA	20171006	CA20162982122	20160407
CL2017002552 A1	20180629	CL20170002552	20171010
CN107710093 A	20180216	CN201680028108	20160407
CO20170011449 A2	20190930	CO20170011449	20171107
EP3281078 A1	20180214	EP20160777270	20160407
EP3281078 A4	20180905	EP20160777270	20160407
HK1249596 A1	20181102	HK20180109067	20180712
ID201805535 A	20180525	ID2017PID07437	20160407
IL254913 A0	20171231	IL20160254913	20160407
IN201737037875 A	20171117	IN201737037875	20171026
JP2018511160 T2	20180419	JP20180503737T	20160407
JP6646727 B2	20200214	JP20180503737T	20160407
KR20180020127 A	20180227	KR20177032092	20160407
MX2017012992 A1	20180212	MX20170012992	20160407
MX368021 B	20190913	MX20170012992	20160407
PH2017501843 A	20180226	PH20170501843	20171009
RU2017137516 A	20190507	RU20170137516	20160407
RU2017137516 A3	20190507	RU20170137516	20160407
RU2706412 C2	20191118	RU20170137516	20160407
SG11201708309U A1	20171129	SG20171108309	20160407
TH180886 A	20181025	TH20171006066	20160407
US2016302274 AA	20161013	US20160093430	20160407
US2016302287 AA	20161013	US20160093438	20160407
US9648706 BB	20170509	US20160093430	20160407
WO16164568 A1	20161013	WO2016US26421	20160407
ZA201707104 A	20191127	ZA20170007104	20171019

Priority:

US20150144070P	20150407	AU20160246731	20160407	RU20170137516	20160407
US20160093430	20160407	US20160093438	20160407	WO2016US26421	20160407
AU20200200673	20200130				

Probable Assignee: EARTH STAR SOLUTIONS LLC

Assignee(s): (std): EARTH STAR SOLUTIONS LLC

Assignee(s): ERT STAR SOLYUSHNZ LLK ; MILLAR GARY BRET

Inventor(s): (std): GARY BRET MILLAR ; MILLAR GARY BRET

Inventor(s): MILLAR GARI BRET

Agent(s): GRIFFITH HACK; GOWLING WLG CANADA LLP; KREBS POULSEN CLAUS; MOORE MICHAEL RICHARD; INSIGHT HK INTELLECTUAL PROPERTY LTD; GEORGE WIDJOJO SH; ONO SHINJIRO; YAMAMOTO OSAMU; MIYAMAE TORU; NAKANISHI MOTOHARU; GOULING VLG INTERNESHNL INK UGRYUMOV VLADISLAV MIKHAJLOVICH; DINSMORE AND SHOHL LLP; BONNER ANTHONY F ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BI BR BN 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 IR 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 SA 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

35) Family number: 65478708 (US2017111978A)

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Title: METHODS AND APPARATUS FOR PROVIDING DC POWER FOR LOW VOLTAGE LIGHTING

Abstract: A DC power supply for lighting includes low voltage driver electronics for any suitable load such as lighting along with a supervisory controller that communicates to the driver electronics via any suitable digital communication protocol. Each driver's output ports include a 3rd wire that communicates to the low voltage load fixture for the purpose of auto-negotiating the appropriate power level without first having to energize the fixture.

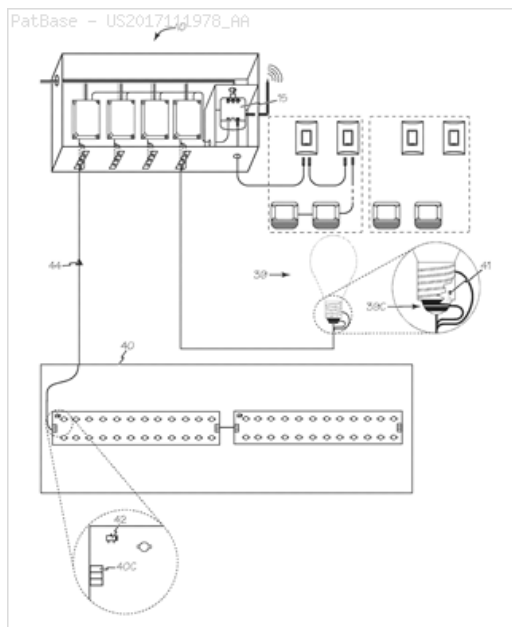
Classifications:

International (IPC 8-9): H02J1/10 H02J3/00 H02J4/00 H02J5/00

H05B37/02 (Advanced/Invention)

CPC: H02J1/10 H02J3/00 H02J4/00 H02J5/00 H05B47/185 H05B47/19

US: 1/1 315/291



Family:

Publication number	Publication date	Application number	Application date
US2017111978 AA	20170420	US20160294529	20161014
US2018199416 AA	20180712	US20180914475	20180307
US2019230778 AA	20190725	US20190373094	20190402
US9918373 BB	20180313	US20160294529	20161014
US10251248 BB	20190402	US20180914475	20180307
US10477658 BB	20191112	US20190373094	20190402

Priority:

US20150241621P 20151014 US20160294529 20161014 US20180914475 20180307
US20190373094 20190402

Probable Assignee: WATT STOPPER INC

Assignee(s): (std): WATT STOPPER INC

Inventor(s): (std): CARTRETTE JONATHAN P ; DAVIS JEFFREY T

Agent(s): PAUL J; CROCKETT AND CROCKETT PC; K DAVID; CROCKETT ESQ K DAVID; BACKOFEN ESQ PAUL J

36) Family number: 67745369 (US2017351287A)

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Title: SYSTEMS AND METHODS FOR CONTROLLING APPLIANCES

Abstract: A control system for controlling operation of an appliance includes a first signal source configured to produce an alternating current (AC) signal, a second signal source configured to produce a second signal, and a controller. The controller includes a processor, a memory device, a first input pin coupled to the first signal source to receive the AC signal, a second input pin coupled to the second signal source to receive the second signal, and an analog to digital (A/D) converter. The A/D converter is coupled to the first input pin and the memory device storing instructions that when executed by the processor cause the processor to sample the second signal at the second input pin only when the first signal has a value of about zero volts at the first input pin.

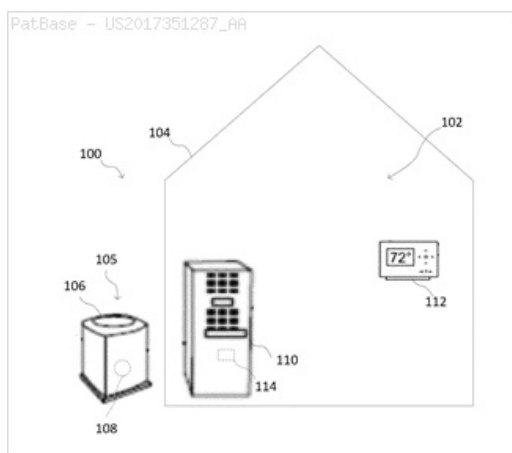
Classifications:

International (IPC 8-9): G05B15/02 G05F1/66

H02J3/00 (Advanced/Invention)

CPC: G05F1/66 G05B15/02 G05B2219/2642

US: 1/1 700/90



Family:

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US2017351287 AA	20171207	US20160173194	20160603
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