

Search history

Search [SP]: A system of electric power generation of alternating current by expansive field that includes: an energy source; a speed variator; a
1: motor assembly; a generator set. (Results 0)

Search (system or device* or apparatus*) and (electric power generat*) (Results 27855)
2:

Search 2 and alterna* current (Results 4332)
3:

Search 3 and expansiv* field (Results 1)
4:

Search 3 and field (Results 3768)
5:

Search 5 and energy source* (Results 535)
6:

Search 6 and speed variator* (Results 0)
7:

Search 6 and motor* (Results 371)
8:

Search 8 and speed (Results 290)
9:

Search 9 and variator (Results 0)
10:

Search 9 and photovoltaic* (Results 65)
11:

Search 9 and (photovoltaic* or solar) (Results 150)
12:

Search 12 and PD < 20161215 (Results 142)
13:

Title: **SYSTEM** AND METHOD FOR ACTIVE POWER LOAD MANAGEMENT

Abstract: Source: US2009062970A [EN] A **system** for managing consumption of power supplied by an electric utility to power consuming **devices** includes at least one client **device** and a server. Each client **device** operates at least partially responsive to control messages received from the server and controls operation of one or more controllable **devices**. Each controllable **device** selectively enables and disables a flow of power to one or more of the consuming **devices**. The server stores information, on a per client **device** basis, relating to power consumed by the consuming **devices**. When a power reduction is requested by the utility, the server selects, based on client **device** information stored in the database, at least one client **device** to which to issue a power reduction message that indicates at least one of an amount of power to be reduced and an identification of a controllable **device** to be instructed to disable a flow of power.

Classifications:

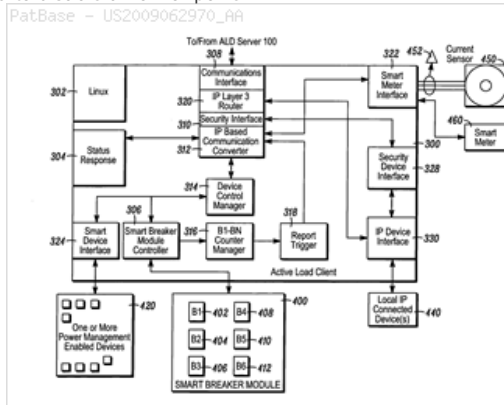
International (IPC 8-9): B23K11/24 B64D11/00 G01D4/00 G01R11/56 G01R21/00 G01R22/06 G01R31/00 G05B11/01 G05B13/02 G05B13/04 G05B15/02 G05B17/02 G05B23/02 G05B24/02 G05D11/00 G05D17/00 G05D3/12 G05D5/00 G05D7/00 G05D9/00 G05F1/66 G06F1/00 G06F1/26 G06F1/28 G06F1/32 G06F11/30 G06F15/16 G06F15/173 G06F19/00 G06Q G06Q10/00 G06Q10/06 G06Q10/10 G06Q30/00 G06Q30/02 G06Q50/00 G06Q50/06 G06Q50/26 G08C15/06 G08C19/00 H02J13/00 H02J13/00 H02J15/00 H02J3/00 H02J3/12 H02J3/14 H02J3/28 H02J3/32 H02J3/36 H02J4/00 H02J7/34 H02J9/00 H02J9/04 H02J9/06 H04B3/54 H04L12/10 H04L12/12 H04L12/14 H04L12/16 H04L12/28 H04L12/58 H04L12/66 H04L12/861 H04L12/863 H04L12/931 H04L29/08 H04L29/10 H04M1/24 H04M11/00 H04Q9/00 (Advanced/Invention); G01D4/00 G01R21/00 G01R22/06 G01R23/165 G05B11/01 G05D11/00 G05D17/00 G05D23/19 G05D3/12 G05D5/00 G05D9/00 G05F1/00 G05F3/00 G05F3/02 G05F5/00 G06Q10/00 G06Q30/00 G06Q50/00 G08B23/00 G08C15/06 H02J3/00 (Advanced/Non-invention); G05D7/00 G06F1/26 G06F1/28 G06F1/32 G06F15/16 G06Q10/00 G06Q30/00 G06Q50/00 H02J13/00 (Core/Invention); G05D23/19 (Core/Non-invention)

International (IPC 1-7): B64D11/00 G06Q50/00

CPC: G06Q30/0202 G06Q30/0206 G06Q30/04 B60L11/1816 B60L11/184 B60L11/1842 B60L11/1844 B60L11/1846 B60L11/1848 B60L2240/72 Y04S20/224 G05B13/02 Y02E60/721 Y02T10/7005 Y02T90/121 Y02T90/128 Y02T90/14 Y02T90/163 Y02T90/169 Y04S10/126 Y04S30/14 G06Q10/06315 G06Q10/06375 G06Q30/02 G06Q30/0205 G06Q30/0277 G06Q30/0207 H04L67/125 H02J13/0013 Y02B70/3266 Y04S20/242 Y02B70/3275 Y02B90/2653 Y02B90/2661 Y02B90/2669 Y04S20/244 Y04S40/126 Y04S40/127 Y04S40/128 G06Q10/06 Y02B90/245 Y04S20/40 G06Q10/063 G06Q10/10 G06Q10/06393 H04L47/6275 H04L12/283 H04B3/54 H04B2203/5433 Y02B90/242 Y04S20/322 H04L67/02 G01D4/004 G01D4/002 G08C15/06 Y02T10/7291 H02J3/28 Y02B90/248 Y04S20/52 Y02E40/76 Y04S10/545 Y02B70/343 Y04S20/34 H02J2003/003 Y04S10/54 H02J3/00 G06Q30/0201 Y02T10/7072 G05B17/02 G05B13/048 G05B2219/39407 G05B2219/39361 G05B15/02 H02J3/14 H04Q9/00 H04Q2209/60 Y02B70/3225 Y04S20/222 Y02P90/82 Y02P90/84 Y02P90/845 G06Q10/00 H02J9/005 H02J9/061 H02J13/0017 G05F1/66 G06Q50/06 H02J2003/143 Y04S50/14 H04L12/10 Y02D50/30 Y02D50/40 H04L12/12 H04L12/2829 H04L12/2834 H04L2012/285

European: G01D4/00R1 G06Q10/00 G06Q10/06 G06Q10/06315 G06Q10/06375 G06Q10/06393 G06Q30/02 G06Q30/0201 G06Q30/0202 G06Q30/0205 G06Q30/0206 G06Q30/0207 G06Q30/0277 G06Q30/04 G06Q50/06 H02J3/14 H04L12/10 H04L12/12 H04L12/28H4B1 H04L29/08N11M T02J13/00F4 T02J3/00L T04L12/28H11B T04L12/28H5B Y02B60/34 Y02B70/32B4 Y04S10/60 Y04S20/22C Y04S50/14

US: 1/1 323/299 323/304 323/318 340/853.2 340/870.02 370/392 379/1.03 379/106.03 379/29.01 700/22 700/22P 700/22S 700/286 700/286P 700/286S 700/291 700/291P 700/291S 700/292 700/292P 700/293 700/294 700/295 700/295P 700/295S 700/296 700/296S 700/297 700/297P 700/297S 700/298 700/300 700/300S 700/36 700/65 702/60 702/61 702/62 705/1 705/14 705/14.1 705/14.100S 705/14.73 705/14.730S 705/34 705/34P 705/412 705/7 705/7.25 705/7.250P 705/7.29 705/7.31 705/7.34 705/7.340S 705/7.35 705/7.37 705/7.370S 705/7.39 705/7.390P 705/7P 709/206 709/206S 709/207 709/207S 709/223 709/223P 709/240 709/240P 713/300 713/310 713/320 713/340



Family:

Publication number	Publication date	Application number	Application date
AU2008296978 AA	20090312	AU20080296978	20080828
AU2008296978 BB	20111103	AU20080296978	20080828
AU2008296979 AA	20090312	AU20080296979	20080828
AU2010245273 AA	20101111	AU20100245273	20100507
AU2010245273 BB	20140703	AU20100245273	20100507
AU2010247777 AA	20101118	AU20100247777	20100511
AU2010247777 AB	20120119	AU20100247777	20100511
AU2010247777 BB	20151126	AU20100247777	20100511
AU2010250121 AA	20101125	AU20100250121	20100520
AU2010303947 AA	20110414	AU20100303947	20101008
AU2010303947 BB	20141002	AU20100303947	20101008
AU2010307299 AA	20110421	AU20100307299	20101005
AU2010307299 BB	20141016	AU20100307299	20101005
AU2012200640 AA	20120223	AU20120200640	20120203
AU2012212224 AA	20120809	AU20120212224	20120201
AU2012212224 BB	20150618	AU20120212224	20120201
AU2012230096 AA	20121018	AU20120230096	20120927
AU2012230096 BB	20160211	AU20120230096	20120927
AU2012246665 AA	20121026	AU20120246665	20120316
AU2012246665 BB	20150813	AU20120246665	20120316
BR112013023811 A2	20161213	BR20131123811	20120316
BRPI0815801 A2	20150218	BR2008PI15801	20080828
BRPI0816110 A2	20150303	BR2008PI16110	20080828
CA2698098 AA	20100226	CA20082698098	20080828
CA2698348 AA	20090312	CA20082698348	20080828
CA2698348 C	20160524	CA20082698348	20080828
CA2761038 AA	20111104	CA20102761038	20100507
CA2761038 C	20151208	CA20102761038	20100507
CA2761562 AA	20111109	CA20102761562	20100511

CA2762387 AA	20111117	CA20102762387	20100520
CA2777147 AA	20120410	CA20102777147	20101005
CA2777147 C	20160809	CA20102777147	20101005
CA2777154 AA	20110414	CA20102777154	20101008
CA2777154 C	20150721	CA20102777154	20101008
CA2826411 AA	20130801	CA20122826411	20120316
CA2826411 C	20160531	CA20122826411	20120316
CA2826431 AA	20130801	CA20122826431	20120201
CA2904829 AA	20101111	CA20102904829	20100507
CA2904829 C	20171212	CA20102904829	20100507
CN101842800 A	20100922	CN200880113529	20080828
CN101842801 A	20100922	CN200880113530	20080828
EP2183720 A2	20100512	EP20080795673	20080828
EP2183720 A4	20120627	EP20080795673	20080828
EP2193497 A2	20100609	EP20080795674	20080828
EP2193497 A4	20120704	EP20080795674	20080828
EP2427806 A1	20120314	EP20100772388	20100507
EP2427806 A4	20140730	EP20100772388	20100507
EP2430805 A2	20120321	EP20100775407	20100511
EP2430805 A4	20141001	EP20100775407	20100511
EP2433190 A1	20120328	EP20100778048	20100520
EP2433190 A4	20130403	EP20100778048	20100520
EP2486707 A2	20120815	EP20100822357	20101008
EP2486707 A4	20130828	EP20100822357	20101008
EP2488883 A1	20120822	EP20100823723	20101005
EP2488883 A4	20140108	EP20100823723	20101005
EP2671302 A1	20131211	EP20120741765	20120201
EP2686980 A2	20140122	EP20120774124	20120316
EP2686980 A4	20141001	EP20120774124	20120316
IN01278DN2010 A	20100806	IN2010DN01278	20100223
IN01583DN2010 A	20100806	IN2010DN01583	20100308
IN04083DN2012 A	20151106	IN2012DN04083	20120509
IN04167DN2012 A	20151106	IN2012DN04167	20120511
IN08790DN2011 A	20130111	IN2011DN08790	20111111
IN08975DN2011 A	20130118	IN2011DN08975	20111117
IN09447DN2011 A	20130125	IN2011DN09447	20111201
JP2010537622 T2	20101202	JP20100522953T	20080828
JP2010539560 T2	20101216	JP20100522954T	20080828
JP2013059256 A2	20130328	JP20120260104	20121128
JP2014509177 T2	20140410	JP20130552597T	20120201
JP2014517365 T2	20140717	JP20130558197T	20120316
JP5324579 B2	20131023	JP20100522954T	20080828
JP5358577 B2	20131204	JP20100522953T	20080828
JP5613749 B2	20141029	JP20120260104	20121128
JP5710028 B2	20150430	JP20130552597T	20120201
JP5807073 B2	20151110	JP20130558197T	20120316
KR101277398 B1	20130620	KR20107006895	20080828
KR101345521 B1	20140115	KR20127012538	20101005
KR101408404 B1	20140617	KR20117029409	20100507
KR101463664 B1	20141204	KR20127011990	20101008
KR20100046276 A	20100506	KR20107006801	20080828
KR20100049122 A	20100511	KR20107006895	20080828
KR20120016133 A	20120222	KR20117029409	20100507
KR20120016145 A	20120222	KR20117030546	20100520
KR20120024995 A	20120314	KR20127001804	20080828
KR20120031943 A	20120404	KR20117029624	20100511
KR20120067368 A	20120625	KR20127011990	20101008
KR20120068986 A	20120627	KR20127012538	20101005
KR20130061192 A	20130610	KR20137012390	20100520
MX2010002252 A1	20100601	MX20100002252	20080828
MX2010002325 A1	20100601	MX20100002325	20080828
MX2011011824 A1	20111206	MX20110011824	20100507
MX2011012031 A1	20120402	MX20110012031	20100511
MX2011012342 A1	20111214	MX20110012342	20100520
MX2012004186 A1	20120717	MX20120004186	20101008
MX2012004312 A1	20120508	MX20120004312	20101005
MX2013008834 A1	20130906	MX20130008834	20120316
MX2013008835 A1	20130906	MX20130008835	20120201
MX340268 B	20160704	MX20140009754	20120201
MX341646 B	20160829	MX20100002325	20080828
US2009062970 AA	20090305	US20070895909	20070828
US2009063228 AA	20090305	US20070001819	20071213
US2010145534 AA	20100610	US20100702640	20100209
US2010145544 AA	20100610	US20100702768	20100209
US2010161148 AA	20100624	US20100715195	20100301
US2010179670 AA	20100715	US20100715124	20100301
US2010191862 AA	20100729	US20100702554	20100209
US2010198713 AA	20100805	US20100702785	20100209
US2010222935 AA	20100902	US20100775979	20100507
US2010235008 AA	20100916	US20100783415	20100519
US2011022239 AA	20110127	US20100896307	20101001

US2011072655 AA	20110722	US20100090884	20106202
US2011172841 AA	20110714	US20110050595	20110317
US2011257809 AA	20111020	US20110172389	20110629
US2011258022 AA	20111020	US20110172261	20110629
US2012221162 AA	20120830	US20120463761	20120503
US2012221163 AA	20120830	US20120464665	20120504
US2012226384 AA	20120906	US20120471589	20120515
US2012239218 AA	20120920	US20120463781	20120503
US2012239219 AA	20120920	US20120466725	20120508
US2012245753 AA	20120927	US20120471575	20120515
US2013184888 AA	20130718	US20130784211	20130304
US2014350745 AA	20141127	US20140456306	20140811
US2014358312 AA	20141204	US20140456348	20140811
US2014365025 AA	20141211	US20140341982	20140728
US2014368353 AA	20141218	US20140444018	20140728
US2015039149 AA	20150205	US20140517399	20141017
US2015154618 AA	20150604	US20140568898	20141212
US2015303691 AA	20151022	US20150790555	20150702
US2015326016 AA	20151112	US20150790579	20150702
US2015380937 AA	20151231	US20150844871	20150903
US2016370819 AA	20161222	US20160253257	20160831
US2017250567 AA	20170831	US20170594219	20170512
US2017277214 AA	20170928	US20170618981	20170609
US2018017985 AA	20180118	US20170705918	20170915
US7715951 BB	20100511	US20070895909	20070828
US8010812 BB	20110830	US20100715124	20100301
US8032233 BB	20111004	US20100715195	20100301
US8131403 BB	20120306	US20100702640	20100209
US8145361 BB	20120327	US20100702785	20100209
US8260470 BB	20120904	US20100702768	20100209
US8307225 BB	20121106	US20110172261	20110629
US8315717 BB	20121120	US20110172389	20110629
US8396606 BB	20130312	US20100775979	20100507
US8527107 BB	20130903	US20100896307	20101001
US8542685 BB	20130924	US20100702554	20100209
US8700187 BB	20140415	US20110050595	20110317
US8805552 BB	20140812	US20120463761	20120503
US8806239 BB	20140812	US20120463781	20120503
US8855279 BB	20141007	US20100900884	20101008
US8890505 BB	20141118	US20120466725	20120508
US8996183 BB	20150331	US20110019867	20110202
US9069337 BB	20150630	US20130784211	20130304
US9130402 BB	20150908	US20120471589	20120515
US9177323 BB	20151103	US20120464665	20120504
US9305454 BB	20160405	US20140444018	20140728
US9651973 BB	20170516	US20140517399	20141017
US9678522 BB	20170613	US20140456306	20140811
US9766644 BB	20170919	US20140456348	20140811
US9881259 BB	20180130	US20140341982	20140728
US9899836 BB	20180220	US20150790555	20150702
WO09032161 A2	20090312	WO2008US10199	20080828
WO09032161 A3	20090430	WO2008US10199	20080828
WO09032162 A2	20090312	WO2008US10200	20080828
WO09032162 A3	20090604	WO2008US10200	20080828
WO10129059 A1	20101111	WO2010US01354	20100507
WO10129059 A8	20120119	WO2010US01354	20100507
WO10129958 A2	20101111	WO2010US34247	20100510
WO10129958 A3	20110217	WO2010US34247	20100510
WO10132456 A2	20101118	WO2010US34395	20100511
WO10132456 A3	20110217	WO2010US34395	20100511
WO10132469 A2	20101118	WO2010US34409	20100511
WO10132469 A3	20110224	WO2010US34409	20100511
WO10132477 A2	20101118	WO2010US34418	20100511
WO10132477 A3	20110224	WO2010US34418	20100511
WO10134987 A1	20101125	WO2010US01489	20100520
WO10134987 A8	20111222	WO2010US01489	20100520
WO11043818 A2	20110414	WO2010US02709	20101008
WO11043818 A3	20110721	WO2010US02709	20101008
WO11046589 A1	20110421	WO2010US02676	20101005
WO11046589 A8	20120510	WO2010US02676	20101005
WO12106431 A1	20120809	WO2012US23488	20120201
WO12106431 A8	20130808	WO2012US23488	20120201
WO12145102 A2	20121026	WO2012US29339	20120316
WO12145102 A3	20130103	WO2012US29339	20120316
ZA201001965 A	20130828	ZA20100001965	20100318
ZA201001968 A	20160928	ZA20100001968	20100318

Priority:

AU20080296978	20080828	AU20080296979	20080828	AU20120200640	20120203
AU20120230096	20120927	CA20152761038	20150929	CA20102761038	20100507
US20070895909	20070828	US20070001819	20071213	US20090176752P	20090508
US20090150978P	20090209	US20090150949P	20090209	US20090176976P	20090511

JP20100522953	20080828	US20070011819	20071213	US20100702640	20100209
US20100702768	20100209	US20100715195	20100301	US20100715124	20100301
US20100702554	20100209	US20090177007P	20090511	US20100702785	20100209
US20090215725P	20090508	US20100775979	20100507	US20090216712P	20090520
US20100783415	20100519	US20090177004P	20090511	US20090279072P	20091015
US20100896307	20101001	US20090278669P	20091009	US20090177044P	20090511
WO2008US10199	20080828	WO2008US10200	20080828	US20100900884	20101008
US20110019867	20110202	US20110172261	20110629	WO2010US01354	20100507
WO2010US01489	20100520	WO2010US34395	20100511	US20110172389	20110629
WO2010US02709	20101008	WO2010US02676	20101005	US20120463761	20120503
US20120464665	20120504	US20120471589	20120515	US20120463781	20120503
US20120466725	20120508	US20120471575	20120515	US20110050595	20110317
US20130784211	20130304	WO2012US23488	20120201	US20140456306	20140811
US20140456348	20140811	US20140341982	20140728	US20140444018	20140728
US20140517399	20141017	US20140568898	20141212	US20150844871	20150903
US20160253257	20160831	US20170594219	20170512	US20170618981	20170609
US20170705918	20170915	US20150790555	20150702	WO2012US29339	20120316

Probable Assignee: LANDIS AND GYR INNOVATIONS INC

Assignee(s): (std): CAUSAM ENERGY INC ; CLEARTRICITY INC ; FORBES JR JOSEPH W ; FORBES JOSEPH W JR ; CONSERV INC ; FORBES JOSEPH W ; AMERICA CONNECT INC ; LANDIS AND GYR INNOVATIONS INC ; WEBB JOEL L ; MOORE ROY ; SHAW DAVID ; LONG JOHN O F

Assignee(s): LONG JOHN OF ; LANDIS AND GYR TECHNOLOGY INC ; BCIP VENTURES LLC ; COMERICA BANK ; JOSEPH W FORBES JR ; CONSERV IC

Inventor(s): (std): JOEL L WEBB ; JOSEPH W FORBES JR ; MOORE ROY ; SHAW DAVID ; FORBES JR JOSEPH W ; FORBES JOSEPH W JR ; FORBES JOSEPH W ; WEBB JOEL L ; LONG JOHN O F

Inventor(s): JOHN O F LONG ; LONG JOHN OF ; WEBB JOEL ; LONG JOHN ; JOHN OF LONG ; FORBES JOSEPH ; FORBES JR ; FORBES JR JOSEPH

Agent(s): SPRUSON AND FERGUSON; GRIFFITH HACK; FINLAYSON AND SINGLEHURST; EQUINOX; SIM AND MCBURNEY; MCLEISH NICHOLAS ALISTAIR MAXWELL; HOFSTETTER ALFONS J; BOULT WADE TENNANT; GARY ROBINSON P A; WOMBLE CARLYLE SANDRIDGE AND RICE PLLC; GRAY ROBINSON PA; DANIEL C; GRAYROBINSON PA; WOMBLE CARLYLE SANDRIDGE AND RICE LLP; GRAY ROBINSON P A; TRIANGLE PATENTS PLLC; NEO IP; KILPATRICK TOWNSEND AND STOCKTON LLP; CRILLY DANIEL C; TIMAR JOHN J ET AL

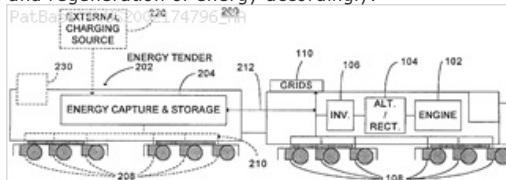
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM 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

Title: LOCOMOTIVE ENERGY TENDER

Abstract: Source: US2002174796A [EN] An energy tender vehicle for use in connection with a hybrid energy locomotive **system** having an energy storage and regeneration **system**. The energy storage and regeneration **system** captures dynamic braking energy, excess **motor** energy, and externally supplied energy in one or more energy storage subsystems, including a flywheel, a battery, an ultra-capacitor, or a combination of such subsystems. In one form, the energy storage and regeneration **system** is located in the energy tender vehicle. The energy tender vehicle is optionally equipped with traction **motors**. In one form, the energy tender is configured to operate without any power connections to the locomotive. An energy management **system** is responsive to power storage and power transfer parameters, including data indicative of present and future track profile information, to determine present and future electrical energy storage and supply requirements. The energy management **system** controls the storage and regeneration of energy accordingly.

Classifications:

International (IPC 8-9): A63H19/00 B60K1/00 B60K15/00 B60K6/04 B60K6/24 B60K6/28 B60K6/44 B60K6/46 B60L11/00 B60L11/02 B60L11/12 B60L11/14 B60L11/16 B60L11/18 B60L15/00 B60L15/20 B60L15/32 B60L7/06 B60L7/12 B60L7/14 B60L7/22 B60L9/00 B60L9/02 B60L9/16 B60W10/06 B60W10/08 B60W10/18 B60W10/26 B60W20/00 B60W40/02 B61C1/00 B61C17/00 B61C17/12 B61C3/00 B61C3/02 B61C5/00 B61C7/04 B61D17/00 B61L11/00 B61L15/00 B61L17/00 B61L25/02 B61L3/00 B61L3/12 F01B23/10 F02D19/00 F02D19/06 F02D28/00 F02D41/00 F02D41/02 G01M17/00 G05D1/00 G06F19/00 H02P3/14 H02P5/00 (Advanced/Invention); B60K1/04 B60K15/03 B61L15/00 F02D29/06 F02D41/14 (Advanced/Non-invention); B60L11/00 B60L11/02 B60L15/00 B60L15/20 B60L7/00 B61C1/00 B61C17/00 B61C3/00 B61C7/00 B61D17/00 B61L15/00 B61L25/00 B61L3/00 F01B23/00 G01M17/00 G05D1/00 G06F19/00 (Core/Invention); B61C B61L (Subclass/Invention)



International (IPC 1-7): B60L11/12 B60L11/16 B60L15/20 B61C B61C1/00 B61C11/00 B61C17/00 B61C3/00 B61C7/04 B61L1/18 B61L15/00 B61L25/02 B61L27/00 B61L3/12 G01C21/26 G05D1/00 G06F17/00 G06F19/00 G06F7/00 H02J7/00
CP: B61L25/048 Y10S903/93 Y02T10/7241 Y02T10/648 B60K6/28 B60K6/44 B60L3/0046 B60L7/02 B60L9/00 B60L2210/40 B60L2220/12 B60L2220/14 B60L2270/20 B60W10/26 Y02T10/623 Y02T10/6278 Y02T10/646 F02D19/0639 B60Y2304/076 B60L2270/40 B60L11/1842 Y02E60/721 Y02T90/128 Y02T90/163 Y04S10/126 B60L2270/12 B61L25/028 B61L27/0094 B61L2201/02 B60L9/005 B60L2260/28 B60L15/32 B61L25/021 B61L3/121 B61L3/127 B61L17/00 B61L25/023 B61L25/026 Y02T10/7027 Y02T90/121 B60L11/1801 B60K1/04 B60K2001/0455 B60K2015/03118 B60K2015/03157 B60K2015/03217 B60L11/1822 B60L2240/62 B60L2240/64 B60L2240/642 B60L2240/662 B60W10/18 B60W40/02 B60W2520/10 B60W2550/12 B60W2550/13 B60W2550/141 B60W2550/142 B60W2550/143 B60W2550/22 B60W2550/402 B60W2560/02 F02D19/0634 F02D19/0697 F02D2200/0611 Y02T10/52 Y02T10/7072 Y02T90/124 Y02T90/14 Y02T90/162 F02D41/0025 B61L15/0027 B61L15/0072 B61L25/025 B61L27/0038 B61L2205/04 B60L7/06 B60K6/46 B60L7/12 B60L7/14 B60L7/22 B60L9/02 B60L9/16 B60L11/005 B60L11/12 B60L11/123 B60L11/123 B60L11/14 B60L11/16 B60L11/1803 B60L15/2045 B60L2200/40 B60L2220/20 B60L2240/70 B60Y2200/14 Y02T10/6217 Y02T10/6269 Y02T10/7005 Y02T10/7022 Y02T10/7077 Y02T10/7283 Y02T10/7291 Y02T10/645 Y02T10/72 F02D2041/1417 B61C7/04 F02D19/0665 Y02T10/84 B60L15/20 Y02T30/16 B60L2200/26 B61L3/006 B61L3/125 B61L15/0036 B61L15/0081 F02D19/0615 F02D29/06 F02D41/021 F02D2200/604 F02D2200/701 Y02T10/36 Y02T90/16 B60L3/12 B60L11/02 B60L2270/142

European: B60K6/04B6 B60K6/04D6 B60K6/04H6 B60K6/28 B60K6/44 B60K6/46 B60L11/00B2 B60L11/12 B60L11/12D B60L11/14 B60L11/16 B60L11/18A B60L11/18C B60L11/18L6 B60L15/20 B60L15/20E B60L15/32 B60L3/00F6 B60L7/02 B60L7/06 B60L7/12 B60L7/14 B60L7/22 B60L9/00 B60L9/00B B60L9/02 B60L9/16 B60W10/18 B60W10/26 B60W40/02 B61C3/02 B61L15/00B1 B61L15/00B2 B61L15/00G B61L15/00H B61L17/00 B61L25/02A B61L25/02B B61L25/02C B61L25/02D B61L25/02E B61L27/00 B61L27/00C B61L27/00H2 B61L3/00C B61L3/12A B61L3/12D F02D41/00F F02D41/02C L60K1/04 L60K1/04C L60K15/03L L60K15/03L9 L60K15/03S2 L60L200/26 L60L200/40 L60L210/40 L60L220/12 L60L220/14 L60L220/20 L60L240/62 L60L240/64 L60L240/64B L60L240/66B L60L240/70 L60L260/28 L60L270/20 L60W520/10 L60W550/12 L60W550/13 L60W550/14A L60W550/14B L60W550/14C L60W550/22 L60W550/40A L60W560/02 L60Y200/14 L61L201/02 L61L205/04 R02D200/0611 R02D200/604 R02D200/701 R02D29/06 R02D41/14B20A2 Y02T10/52 Y02T10/62F12 Y02T10/62F2 Y02T10/62F6 Y02T10/62H2 Y02T10/64D8 Y02T10/70 Y02T10/70B Y02T10/70D Y02T10/70F Y02T10/70F2 Y02T10/70J Y02T10/70J2 Y02T10/72D6 Y02T10/72D8 Y02T30/12 Y02T90/12F Y02T90/14 Y02T90/16 Y02T90/16B2

US: 1/1 104/288 104/288S 104/289 105/1.4 105/1.400P 105/14 105/26.05 105/26.050P 105/27 105/34.2 105/342 105/35 105/35P 105/35S 105/49 105/49S 105/5 105/50 105/50P 105/61 105/61P 180/65.2 180/65.21 180/65.245 180/65.265 180/65.285 180/65.29 180/65.3 180/65.31 180/65.310S 180/65.51 246/167.00R 246/167R 246/182 246/182.00RS 246/182R 246/186 246/187 246/187.00A 246/187.00C 246/187A 246/187C 246/3 246/3P 290/3 303/16 303/20 303/7 318/139 318/139P 318/139S 318/376 318/376P 318/66 318/66S 318/86 320/101 320/104 320/104P 340/424 340/426 340/426.35 340/5.6 340/6.11 340/825.36 370/432 377/24 377/26 455/456.3 701/1 701/102 701/102P 701/104 701/19 701/19P 701/1S 701/20 701/20P 701/213 701/213S 701/22 701/22P 701/29 701/29P 701/33.4 701/33.400P 701/35 701/35P 701/469 701/469S 701/70 903/930

Family:

Publication number	Publication date	Application number	Application date
AU2004243288 AA	20041209	AU20040243288	20040521
AU2004243288 BB	20100218	AU20040243288	20040521
AU2005267004 AA	20060202	AU20050267004	20050721
AU2005267004 BB	20120315	AU20050267004	20050721
AU2012202675 AA	20120531	AU20120202675	20120508
AU2012202675 BB	20131024	AU20120202675	20120508
CA2378774 AA	20020927	CA20022378774	20020325
CA2378774 C	20091222	CA20022378774	20020325
CA2547996 AA	20060223	CA20052547996	20050804
CA2547996 C	20130514	CA20052547996	20050804
CA2548956 AA	20060608	CA20042548956	20040521
CA2575057 AA	20070123	CA20052575057	20050721
CN101027211 A	20070829	CN200580032262	20050721
CN101027211 B	20101103	CN200580032262	20050721
CN101687506 A	20100331	CN200880010344	20080123
CN101687506 B	20130731	CN200880010344	20080123
CN103770659 A	20140507	CN201410042153	20050804
CN1906050 A	20070131	CN200580001562	20050804
DE112005000056 T5	20060727	DE200511000056	20050804
DE602005024407 D1	20101209	DE200560024407T	20050721
EP1245431 A2	20021002	EP20020252126	20020325
EP1245431 A3	20031126	EP20020252126	20020325
EP1776266 A1	20070425	EP20050773380	20050721
EP1776266 B1	20101027	EP20050773380	20050721

IN00675DN2007 A	20070427	IN2007DN00675	20070124
IN285398 B	20170721	IN2007DN00675	20070124
MX2007000946 A1	20070412	MX20070000946	20050721
RU2006121131 A	20071227	RU20060121131	20040521
RU2357886 C2	20090610	RU20060121131	20040521
US2002174796 AA	20021128	US20010032714	20011226
US2002174797 AA	20021128	US20010033191	20011226
US2002174798 AA	20021128	US20010033347	20011226
US2002177929 AA	20021128	US20010033172	20011226
US2003120400 AA	20030626	US20030354638	20030130
US2003150352 AA	20030814	US20030378335	20030303
US2003151387 AA	20030814	US20030378431	20030303
US2003233959 AA	20031225	US20030435261	20030509
US2004245410 AA	20041209	US20040849314	20040519
US2005005814 AA	20050113	US20040914731	20040809
US2005010338 AA	20050113	US20040850992	20040521
US2005039630 AA	20050224	US20040918849	20040809
US2005120904 AA	20050609	US20040008708	20041209
US2005171658 AA	20050804	US20050094006	20050330
US2005235865 AA	20051027	US20050149014	20050609
US2006005736 AA	20060112	US20050180345	20050713
US2006005737 AA	20060112	US20050180320	20050713
US2006005738 AA	20060112	US20050215376	20050830
US2006005739 AA	20060112	US20050215377	20050830
US2006012320 AA	20060119	US20050180251	20050713
US2006129289 AA	20060615	US20050136769	20050525
US2007137514 AA	20070621	US20070680706	20070301
US2007142985 AA	20070621	US20070671656	20070206
US2007144398 AA	20070628	US20070681597	20070302
US2007145918 AA	20070628	US20070681557	20070302
US2009132113 AA	20090521	US20080345135	20081229
US2009314179 AA	20091224	US20090502427	20090714
US2010186619 AA	20100729	US20100752309	20100401
US2011041723 AA	20110224	US20100939353	20101104
US2011106401 AA	20110505	US20110984792	20110105
US2013338901 AA	20131219	US20130965712	20130813
US2016010574 AA	20160114	US20150862563	20150923
US6591758 BB	20030715	US20010033347	20011226
US6612245 BB	20030902	US20010032714	20011226
US6612246 BB	20030902	US20010033191	20011226
US6615118 BB	20030902	US20010033172	20011226
US6922619 BB	20050726	US20030354638	20030130
US6973880 BB	20051213	US20030378335	20030303
US7131614 BB	20061107	US20040849314	20040519
US7137344 BB	20061121	US20040918849	20040809
US7185591 BB	20070306	US20040914731	20040809
US7231877 BB	20070619	US20030435261	20030509
US7302895 BB	20071204	US20040008708	20041209
US7325498 BB	20080205	US20070681597	20070302
US7430967 BB	20081007	US20050180251	20050713
US7448328 BB	20081111	US20050180320	20050713
US7500436 BB	20090310	US20050136769	20050525
US7532960 BB	20090512	US20030378431	20030303
US7571683 BB	20090811	US20050149014	20050609
US7669534 BB	20100302	US20070681557	20070302
US7854203 BB	20101221	US20090502427	20090714
US7882789 BB	20110208	US20070680706	20070301
US7949441 BB	20110524	US20050094006	20050330
US8371230 BB	20130212	US20100752309	20100401
US8534199 BB	20130917	US20110984792	20110105
US9151232 BB	20151006	US20130965712	20130813
US9193268 BB	20151124	US20070671656	20070206
US9233612 BB	20160112	US20100939353	20101104
US9822717 BB	20171121	US20150862563	20150923
WO04106133 A2	20041209	WO2004US16240	20040521
WO04106133 A3	20070208	WO2004US16240	20040521
WO05120925 A2	20051222	WO2004US16050	20040521
WO05120925 A3	20060209	WO2004US16050	20040521
WO06012484 A1	20060202	WO2005US25988	20050721
WO06020476 A2	20060223	WO2005US27623	20050804
WO06020476 A3	20060323	WO2005US27623	20050804
WO08097715 A2	20080814	WO2008US51787	20080123
WO08097715 A3	20091210	WO2008US51787	20080123
WO08109215 A2	20080912	WO2008US52871	20080204
WO08109215 A3	20081204	WO2008US52871	20080204
ZA200605314 A	20071227	ZA20060005314	20060627
ZA200701160 A	20080827	ZA20070001160	20070208

Priority:

AU20050267004	20050721	AU20120202675	20120508	US20010033172	20011226
US20010033191	20011226	CA20022378774	20020325	US20010032714	20011226
US20030354638	20030130	US20020319128P	20020228	US20010278978P	20010328

US20030438421 20030309 US20070278375P 20070327 US20040080397 20040326

US20040590853 20040723 US20050094006 20050330 US20030528021P 20031209
US20040474151P 20040522 US20050180251 20050713 US20050180320 20050713
US20040914731 20040809 US20040849314 20040519 US20030474151P 20030522
US20040008708 20041209 US20040590853P 20040723 US20040918849 20040809
US20050136769 20050525 US20050180345 20050713 US20050149014 20050609
US20070680706 20070301 US20070671656 20070206 US20070681597 20070302
US20070681557 20070302 WO2005US27623 20050804 US20080345135 20081229
WO2005US25988 20050721 WO2004US16240 20040521 US20090502427 20090714
WO2008US51787 20080123 US20100939353 20101104 US20110984792 20110105
US20050215376 20050830 US20100752309 20100401 US20050215377 20050830
US20130965712 20130813 US20150862563 20150923

Probable Assignee: GENERAL ELECTRIC CO

Assignee(s): (std): DZHENNERAL EHLEKTRIK KOMPANI ; SEXAUER SCOTT ; KELLNER STEVEN ANDREW ; SWEeley BRUCE M ; KRAELING MARK BRADSHAW ; PELTONEN GLEN PAUL ; KISS JAMES ; KUMAR AJITH KUTTANNAIR ; PELKOWSKI STEPHEN MATTHEW ; SHAFFER GLENN ; KELLNER STEVEN A ; KISAK JEFFREY ; KUMAR AJITH K ; PELKOWSKI STEVEN MATTHEW ; HESS GERALD JAMES JR ; SHAFFER GLENN ROBERT ; HILL LEONARD MICHAEL ; PELKOWSKI STEVEN M ; KRAELING MARK B ; PELTONEN GLEN P ; SHAFFER GLENN R ; HILL LEONARD M ; KUMAR AJITH KUTTANNAIR ; HENDRICKSON BRADLEY CHARLES ; DAUM WOLFGANG ; HENDRICKSON BRADLEY C ; HESS GERALD J ; HESS GERALD J JR ; GENERAL ELECTRIC COMPANY ; BALLESTY DANIEL ; BALLESTY DANIEL M ; BALLESTY DANIEL MALACHI ; CARL ROWOLD ; GEN ELECTRIC ; WOLF DANIEL F ; YOUNG HENRY TODD

Assignee(s): ZHANG NING ; AHMED BAIG MIRZA AREF ; BAIG MIRZA A A ; BAIG MIRZA AA ; GENERAL ELECTRIC CO ; HESS GERALD JAMES ; CORRY JAMES G ; EVANS RICHARD L ; CORRY JAMES GLEN ; KISAK JEFFREY JAMES ; PELTZ DAVID MICHAEL ; KUMAR AJITH ; WOLF DANIEL ; HILL LEONARD ; PALLO CHRISTOPHER E

Inventor(s): (std): AHMED BAIG MIRZA AREF ; ANDREW CHAEL KELLNER STEVEN ; BAIG MIRZA A A ; BAIG MIRZA AREF AHMED ; BALLESTI DEHNIEL MALAKAJ ; BALLESTY DANIEL ; BALLESTY DANIEL MALACHI ; CORRY JAMES G ; CORRY JAMES GLEN ; DAUM WOLFGANG ; HENDRICKSON BRADLEY C ; HENDRICKSON BRADLEY CHARLES ; HESS JR GERALD J ; HILL LEONARD ; HILL LEONARD M ; JAME KUMAR AJITH KUTTANNAIR PE ; JAMES HESS GERALD JR ; JAMES HESS JR GERALD ; JAMES KISAK JEFFREY ; HESS GERALD J ; HESS GERALD JAMES ; HESS GERALD JAMES JR ; KAJSAK DZHEFFRI DZHEJMS ; KELLNER STEVEN A ; KELLNER STEVEN ANDREW ; KHENDRIKSON BREHDLI CHARLZ ; KHESS DZHERALD DZHEJMS ML ; KRAELING MARK B ; KRAELING MARK BRADSHAW ; KREJLING MARK BREHDSHOU ; KUMAR ADZHIT KUTTANNAIR ; KUMAR AJITH ; KUMAR AJITH KUTTANNAIR ; KING ROBERT DEAN ; KISAK JEFFREY ; KISAK JEFFREY JAMES ; KISS DZHEJMS ; KISS JAMES ; KISS JR JAMES MICHAEL ; EVANS RICHARD L ; KUTTANNAIR KUMAR AJITH ; MALACHI BALLESTY DANIEL ; MATTHEW PELKOWSKI STEPHEN ; MATTHEW PELKOWSKI STEVEN ; MICHAEL HILL LEONARD ; MICHAEL PELTZ DAVID ; PALLO CHRISTOPHER E ; PAUL PELTONEN GLEN ; PELKOVSKI STIVEN MEHTT JU ; PELKOWSKI STEPHEN MATTHEW ; PELKOWSKI STEVEN M ; PELKOWSKI STEVEN MATTHEW ; PELTONEN GLEN P ; PELTONEN GLEN PAUL ; PELTONEN GLEN POL ; PELTTS DEHVID MAJKL ; PELTZ DAVID MICHAEL ; ROBERT SHAFFER GLENN ; SALASOO LEMBIT ; SEXAUER SCOTT ; SHAFFER GLENN ; SHAFFER GLENN R ; SHAFFER GLENN ROBERT ; SWEeley BRUCE M ; TODD KUMAR AJITH KUTTANNAIR YO ; WOLF DANIEL ; WOLF DANIEL F ; YOUNG HENRY T ; YOUNG HENRY TODD ; ZHANG NING ; HILL LEONARD MICHAEL ; HESS GERALD J JR ; CHARLES HENDRICKSON BRADLEY ; BRADSHAW KRAELING MARK ; BALLESTY DANIEL M ; ANDREW KELLNER STEVEN ; WOLFGANG DAUM ; STEVEN MATTHEW PELKOWSKI ; STEVEN ANDREW KELLNER ; MARK BRADSHAW KRAELING ; LEONARD MICHAEL HILL ; JAMES KISS ; HESS JR GERALD JAMES ; GLENN ROBERT SHAFFER ; GLEN PAUL PELTONEN ; GERALD JAMES JR HESS ; DANIEL MALACHI BALLESTY ; DANIEL F WOLF ; BRADLEY CHARLES HENDRICKSON ; AJITH KUTTANNAIR KUMAR ; KUMAR AJITH KUTTANNAIR ; MESALIC ADMIR ; KUMAR AJITH K ; KUTTANNAIR KUMAR AJITH ; KUMAR AJITH KUTTANNAIR

Inventor(s): KUMAR AJITH KUTTANNAIR PELKOWSKI STEVEN... ; KUMAR AJITH KUTTANNAIR PELKOWSKI STEVEN MATTHEW KRAELING MARK BRADSHAW PELTONEN GLEN PAUL KISS JAMES BALLESTY DANIEL MALACHI DAUM WOLFGANG HENDRICKSON BRADLEY CHARLES HESS GERALD JAMES JR SHAFFER GLE ; GERALD JAMES HESS JR ; PELKOVSKI STIVEN MEHTT'JU ; KELLNER STEVEN ; YOUNG HENRY ; SWEeley BRUCE ; PELTZ DAVID ; PELTONEN GLEN ; PELKOWSKI STEVEN ; PELKOWSKI STEPHEN ; PALLO CHRISTOPHER ; HENDRICKSON BRADLEY ; KRAELING MARK ; KUMAR AJITH KUTTANNAIR YOUNG HENRY TODD ; KING ROBERT ; HESS GERALD JJR ; JEFFREY JAMES KISAK ; JR GERALD J ; HESS ; HESS GERALD ; DAVID MICHAEL PELTZ ; EVANS RICHARD ; CHAEL KELLNER STEVEN ANDREW ; CORRY JAMES ; BAIG MIRZA AA ; BAIG MIRZA

Agent(s): PHILLIPS ORMONDE FITZPATRICK; CRAIG WILSON AND CO; BEDFORD GRANT RICHARD; SENNIGER POWERS LEAVITT AND ROEDEL; BEUSSE BROWNLEE WOLTER MORA AND MAIRE P A; SENNIGER POWERS; BEUSSE BROWNLEE WOLTER MORA AND MAIRE PA; BEUSSE WOLTER SANKS MORA AND MAIRE PA; SENNIGER POWERS (GETS); SENNIGER POWERS GETS; GENERAL ELECTRIC COMPANY,GLOBAL RESEARCH; GENERAL ELECTRIC CO GLOBAL RESEARCH; JOSEPH FISCHER BEUSSE BROWNLEE WOLTER MORA AND MAIRE PA; ROWOLD ESQ CARL; MORA ESQ ENRIQUE J; CARL; ENRIQUE J; SENNIGER POWERS CARL ROWOLD; CARLOS; SENNIGER POWERS CARLOS HANZE; BEUSSE WOLTER SANKS MORA AND MAIRE P A; DAVID G; CARLOS LUIS; SENNIGER POWERS LLP; WAWRZYN ESQ ROBERT; OBRIEN ESQ CIAN G; CIAN G; ROBERT; JOHN; GE GLOBAL PATENT OPERATION; JOHN A; GLOBAL PATENT OPERATION; TOOP BARBARA A 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 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: PHARMA-INFORMATICS **SYSTEM**

Abstract: Source: US2008284599A [EN] Compositions, **systems** and methods that allow for the detection of the actual physical delivery of a pharmaceutical agent to a body are provided. Embodiments of the compositions include an identifier and an active agent. The invention finds use in a variety of different applications, including but not limited to, monitoring of therapeutic regimen compliance, tracking the history of pharmaceutical agents, etc.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
207202	ARIPIPIRAZOLE	ABILIFY MYCITE KIT	OTSUKA PHARM CO LTD	Nov 13, 2017

Classifications:

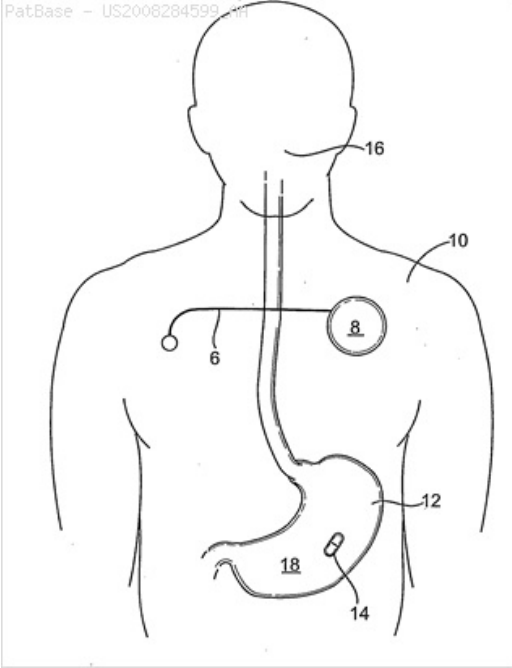
International (IPC 8-9): A61B A61B1/00 A61B1/273 A61B5/00 A61B5/026 A61B5/0265 A61B5/029 A61B5/04 A61B5/05 A61B5/053 A61B5/07 A61B5/145 A61B5/1473 A61G12/00 A61J A61J1/00 A61J3/00 A61J3/07 A61J7/00 A61J7/04 A61K9/00 A61K9/48 A61L33/00 A61M37/00 A61M5/168 A61M5/172 A61N1/00 A61N1/36 A61N1/362 A61N1/365 A61N1/37 A61N1/372 A61N1/378 B05D5/12 B23P11/00 B32B38/04 B65D41/02 B65D51/24 B65D83/04 B67D7/06 C23C14/06 C23C14/24 C23C14/34 G02B23/24 G06F19/00 G06K7/10 G06Q50/22 G08B1/08 G08B13/14 G08B21/02 G08B21/18 G08C17/00 H01M4/04 H01M4/06 H01M4/08 H01M6/32 H01M6/34 H01Q1/12 H01Q1/27 H01R43/00 H04B H04B1/02 H04B1/034 H04B1/06 H04B1/3816 H04B1/59 H04B13/00 H04B13/02 H04B7/24 H04Q5/22 (Advanced/Invention); A61B5/00 A61B5/01 A61B5/03 A61B5/053 A61B5/07 A61B5/145 A61B5/1473 A61J7/04 A61K9/00 A61N1/372 G08C17/02 H01Q1/27 H04B1/38 H04B1/3888 (Advanced/Non-invention); A61B1/273 A61B5/00 A61B5/026 A61B5/07 A61B5/145 A61J7/00 A61K9/00 A61K9/48 A61M37/00 A61N1/00 A61N1/362 G06F19/00 G08C17/00 H01M6/30 H01R43/00 H04B7/24 (Core/Invention); A61B A61J A61K G06F H01Q H04B (Subclass/Invention)

International (IPC 1-7): G06F19/00

CPC: H01M6/00 A61B5/0022 A61B5/026 A61N1/37217 A61M5/172 A61B5/0215 A61B5/0265 A61B5/145 A61B5/14535 A61B5/415 A61B5/418 A61B5/6862 A61B5/6876 A61N1/37223 H04B1/0343 H04B13/005 A61B2562/12 A61B5/0008 Y10T29/49826 Y10T156/1056 A61B5/0002 A61B2560/0412 G06F19/3462 A61B5/01 A61B5/036 A61B2562/0214 H04B1/3888 H04B2001/3894 A61B5/076 H01M4/06 H01M4/08 H01M4/0402 A61B5/6801 H01M6/34 H01M4/366 G06K7/10168 H01M4/381 H01M4/582 H01M4/66 H01M2220/30 A61B5/1473 A61B5/7285 A61B5/0538 A61B5/681 A61B2560/0462 A61B2562/08 A61B5/073 A61B5/4833 Y10T29/49117 Y10T29/49002 A61B2562/18 G08B21/18 B65D41/02 A61B5/7282 A61B5/6861 A61J7/0084 A61J7/04 A61J7/0418 A61J2200/30 A61J2205/60 A61J7/0436 A61J7/0481 A61B5/0028 A61B5/14539 A61B5/4839 A61B2560/0214 A61J3/007 A61N1/37288 G06F19/3418 H01Q1/273 A61B5/0031 A61B2562/125 A61B2562/162 H02J50/20 A61B5/07 Y02A90/26

European: A61B5/00B A61B5/00B7B A61B5/00B8 A61B5/00B9 A61B5/0265 A61B5/07B A61B5/145H A61B5/145J A61B5/41J2 A61B5/41J8 A61B5/48J2 A61B5/68D1L A61B5/68D2H A61J3/00M A61J7/04B3 A61N1/372D2E G06F19/34C G06F19/34L1 H01Q1/27C K61B5/00B K61B5/00B3D K61B5/00B7B K61B5/01 K61B5/0215 K61B5/03H K61B5/053N K61B5/07B K61B5/145 K61B5/145J K61B5/1473 K61B5/48J2 K61B560/02B4 K61B560/04B2 K61B562/12 K61J7/04B1D2 K61J7/04B1G K61J7/04B3A2 K61N1/372D8S

US: 1/1 156/252 156/252S 204/279 222/192 222/192S 222/23 222/23P 29/428 29/428S 29/592.1 29/825 29/825S 340/10.1 340/539.11 340/539.12 340/539.120P 340/572.1 340/572.100P 340/572.2 340/572.7 340/572.8 340/573.1 340/870.28 347/193 427/123 427/124 427/125 427/125 427/154 427/154 427/155 427/180 427/197 427/199 427/2.1 427/2.11 427/2.12 427/2.120S 427/2.13 427/202 427/209 427/210 427/248.1 427/250 427/255.11 427/255.15 427/255.7 427/258 427/259 427/269 427/270 427/271 427/272 427/282 427/287 427/299 427/331 427/372.2 427/383.1 427/383.3 427/383.5 427/384 427/385.5 427/402 427/404 427/405 427/419.1 427/534 427/58 427/596 427/8 427/96.1 427/96.2 427/96.6 427/97.1 427/97.3 427/97.4 427/97.5 427/97.6 427/98.4 427/98.5 427/98.6 427/99.2 427/99.4 429/119 455/39 455/39P 455/40 455/41.2 600/109 600/300 600/302 600/302P 600/309 600/309S 600/377 600/377P 600/407 600/505 600/505S 600/549 600/561 604/66 604/66S 604/891.1 604/93.01 604/93.010S 607/17 607/17S 607/32 607/32S 607/60



Family:

Publication number	Publication date	Application number	Application date
AU2006239221 AA	20061102	AU20060239221	20060428
AU2006239221 BB	20120315	AU20060239221	20060428
AU2006239221 CA	20120816	AU20060239221	20060428
AU2012282690 AA	20130117	AU20120282690	20120710
AU2012282772 AA	20130117	AU20120282772	20120710
AU2012282776 AA	20130117	AU20120282776	20120710
AU2012282776 BB	20170202	AU20120282776	20120710
AU2012282777 AA	20130117	AU20120282777	20120710
AU2017202754 AA	20170518	AU20170202754	20170426
BR112014000620 A2	20170214	BR20141100620	20120710
BR112014000624 A2	20170214	BR20141100624	20120710
BR112014000641 A2	20170214	BR20141100641	20120710
BR112014000645 A2	20170214	BR20141100645	20120710
CA2608144 AA	20061102	CA20062608144	20060428
CA2608144 C	20121113	CA20062608144	20060428
CA2789097 AA	20061102	CA20062789097	20060428
CA2789097 C	20170221	CA20062789097	20060428
CA2789262 AA	20061102	CA20062789262	20060428
CA2789262 C	20161004	CA20062789262	20060428
CA2841830 AA	20140109	CA20122841830	20120710
CA2841833 AA	20140109	CA20122841833	20120710

CA2841904 AA	20140110	CA20122841904	20120710
CA2841909 AA	20140110	CA20122841909	20120710
CA2953847 AA	20061102	CA20062953847	20060428
CN101287411 A	20081015	CN200680023838	20060428
CN101287411 B	20130306	CN200680023838	20060428
CN102379684 A	20120321	CN201110212586	20060428
CN102379684 B	20141119	CN201110212586	20060428
CN103259027 A	20130821	CN201310009091	20060428
CN103781411 A	20140507	CN201280043374	20120710
CN103781411 B	20160106	CN201280043374	20120710
CN103781412 A	20140507	CN201280043438	20120710
CN103781413 A	20140507	CN201280043918	20120710
CN103781413 B	20151202	CN201280043918	20120710
CN103957773 A	20140730	CN201280043578	20120710
CY1116221 T1	20170208	CY20151100202T	20150226
DE602006043334 D1	20141120	DE200660043334T	20060428
DE602006043806 D1	20150108	DE200660043806T	20060428
DE602012014776 D1	20160324	DE201260014776T	20120710
DE602012017875 D1	20160616	DE201260017875T	20120710
DK1889198 T3	20150209	DK20060751858T	20060428
DK2392258 T3	20150112	DK20060006868T	20060428
EP1889198 A2	20080220	EP20060751858	20060428
EP1889198 A4	20101013	EP20060751858	20060428
EP1889198 B1	20141126	EP20060751858	20060428
EP1920418 A2	20080514	EP20060802827	20060901
EP1920418 A4	20101229	EP20060802827	20060901
EP2392258 A1	20111207	EP20110006868	20060428
EP2392258 B1	20141008	EP20110006868	20060428
EP2671507 A2	20131211	EP20130182679	20060428
EP2671507 A3	20140219	EP20130182679	20060428
EP2671508 A1	20131211	EP20130182685	20060428
EP2731489 A2	20140521	EP20120811820	20120710
EP2731489 A4	20150930	EP20120811820	20120710
EP2731494 A2	20140521	EP20120810728	20120710
EP2731494 A4	20150805	EP20120810728	20120710
EP2731495 A2	20140521	EP20120810909	20120710
EP2731495 A4	20150805	EP20120810909	20120710
EP2731496 A2	20140521	EP20120811051	20120710
EP2731496 A4	20141217	EP20120811051	20120710
EP2731496 B1	20160210	EP20120811051	20120710
EP2731497 A2	20140521	EP20120811425	20120710
EP2731497 A4	20150401	EP20120811425	20120710
EP2731497 B1	20160427	EP20120811425	20120710
ES2528403 T3	20150209	ES20060751858T	20060428
HK1113652 A1	20150911	HK20080109088	20080815
HK1113652 A3	20081010	HK20080109088	20080815
HK1158920 A1	20151106	HK20110113748	20080815
HK1158920 A3	20120727	HK20080113748	20080815
HK1166680 A1	20150918	HK20120107364	20120726
HK1196239 A1	20170217	HK20140109909	20141006
HK1196240 A1	20170106	HK20140109910	20141006
HK1198283 A1	20150327	HK20140111828	20141121
IL186898 A0	20080209	IL20070186898	20071024
IL186898 A1	20120131	IL20060186898	20060428
IL214183 A0	20110831	IL20060214183	20060428
IL214183 A1	20150331	IL20060214183	20060428
IL216535 A0	20111229	IL20060216535	20060428
IL216535 A1	20170629	IL20060216535	20060428
IL230387 A0	20140227	IL20120230387	20120710
IL230388 A0	20140227	IL20120230388	20120710
IL230389 A0	20140227	IL20120230389	20120710
IL230390 A0	20140227	IL20120230390	20120710
IL252946 A0	20170831	IL20060252946	20060428
IN00506CN2014 A	20150403	IN2014CN00506	20140122
IN00507CN2014 A	20160701	IN2014CN00507	20140122
IN00508CN2014 A	20150403	IN2014CN00508	20140122
IN00509CN2014 A	20150403	IN2014CN00509	20140122
IN05442DN2011 A	20121012	IN2011DN05442	20110714
IN08678DN2007 A	20071214	IN2007DN08678	20071112
JP2008539047 T2	20081113	JP20080509195T	20060428
JP2009506838 T2	20090219	JP20080529315T	20060901
JP2011212466 A2	20111027	JP20110162568	20110725
JP2012020178 A2	20120202	JP20110231159	20111020
JP2012183385 A2	20120927	JP20120147371	20120629
JP2013163068 A2	20130822	JP20130109679	20130524
JP2013176625 A2	20130909	JP20130109680	20130524
JP2014176753 A2	20140925	JP20140125987	20140619
JP2014522694 T2	20140908	JP20140520261T	20120710
JP2014522695 T2	20140908	JP20140520263T	20120710
JP2014525780 T2	20141002	JP20140520265T	20120710
JP2014526918 A2	20141009	JP20140520262	20120710

JP2014526918 T2	20141009	JP20140520262T	20120710
JP2014529378 T2	20141106	JP20140520264T	20120710
JP2016144696 A2	20160812	JP20160092292	20160502
JP2017208332 A2	20171124	JP20170091953	20170502
JP5088978 B2	20121205	JP20110162568	20110725
JP5400121 B2	20140129	JP20110231159	20111020
JP5683641 B2	20150311	JP20130109679	20130524
JP5714210 B2	20150507	JP20080529315T	20060901
JP5730822 B2	20150610	JP20120147371	20120629
JP5805315 B2	20151104	JP20140520265T	20120710
JP6259395 B2	20180110	JP20140520264T	20120710
KR20140051298 A	20140430	KR20147003475	20120710
KR20140051299 A	20140430	KR20147003476	20120710
KR20140066996 A	20140603	KR20147003474	20120710
KR20140126282 A	20141030	KR20147003324	20120710
MX2014000481 A1	20140908	MX20140000481	20120710
MX2014000482 A1	20140827	MX20140000482	20120710
MX2014000484 A1	20140827	MX20140000484	20120710
MX2014000485 A1	20140908	MX20140000485	20120710
MX336850 B	20160203	MX20140000485	20120710
MX337131 B	20160212	MX20140000484	20120710
MX337132 B	20160212	MX20140000482	20120710
PT1889198 T	20150306	PT20060751858T	20060428
RU2014104519 A	20150820	RU20140104519	20120710
RU2014104691 A	20150820	RU20140104691	20120710
RU2014104692 A	20150910	RU20140104692	20120710
RU2014104693 A	20150910	RU20140104693	20120710
RU2572017 C2	20151227	RU20140104693	20120710
SI1889198 T1	20150227	SI20060031882T	20060428
TH142307 A	20150803	TH20141000218	20120710
TH142308 A	20150803	TH20141000219	20120710
TH142309 A	20150803	TH20141000222	20120710
TH143410 A	20151012	TH20141000221	20120710
TW201317931 A	20130501	TW20120124935	20120711
TW201320962 A	20130601	TW20120124929	20120711
TW201320963 A	20130601	TW20120124936	20120711
TW201321039 A	20130601	TW20120124932	20120711
TW201321536 A	20130601	TW20120124934	20120711
TW201322678 A	20130601	TW20120124931	20120711
TW201336476 A	20130916	TW20120143772	20121122
UA112548 C2	20160926	UA20140001330	20120710
US2008284599 AA	20081120	US20060912475	20060428
US2008306359 AA	20081211	US20060063095	20060901
US2009227204 AA	20090910	US20090404184	20090313
US2010081894 AA	20100401	US20090564017	20090921
US2011105864 AA	20110505	US20100949720	20101118
US2012001752 AA	20120105	US20110153312	20110603
US2012004520 AA	20120105	US20110180498	20110711
US2012004527 AA	20120105	US20110180539	20110711
US2012007734 AA	20120112	US20110180516	20110711
US2012024889 AA	20120202	US20110180538	20110711
US2012062379 AA	20120315	US20110180507	20110711
US2012116188 AA	20120510	US20110180525	20110711
US2012299723 AA	20121129	US20110304274	20111123
US2014051965 AA	20140220	US20130874242	20130430
US2014179221 AA	20140626	US20130059336	20131021
US2015080677 AA	20150319	US20140260196	20140423
US2015080678 AA	20150319	US20140308548	20140618
US2015080679 AA	20150319	US20140308549	20140618
US2015080680 AA	20150319	US20140341639	20140725
US2015080681 AA	20150319	US20140485276	20140912
US2015150480 AA	20150604	US20150596049	20150113
US2015173646 AA	20150625	US20140552218	20141124
US2015223751 AA	20150813	US20150596056	20150113
US2015230729 AA	20150820	US20150699681	20150429
US2016155316 AA	20160602	US20150864277	20150924
US2016174900 AA	20160623	US20150865508	20150925
US2017265813 AA	20170921	US20170474811	20170330
US7978064 BB	20110712	US20090564017	20090921
US8547248 BB	20131001	US20060063095	20060901
US8674825 BB	20140318	US20090404184	20090313
US8730031 BB	20140520	US20110180539	20110711
US8802183 BB	20140812	US20110180525	20110711
US8816847 BB	20140826	US20110153312	20110603
US8836513 BB	20140916	US20110180507	20110711
US8847766 BB	20140930	US20060912475	20060428
US8912908 BB	20141216	US20110180516	20110711
US9119554 BB	20150901	US20100949720	20101118
US9161707 BB	20151020	US20140485276	20140912
US9198608 BB	20151201	US20110304274	20111123
US9439582 BB	20160913	US20140552218	20141124

US9681842 BB	20170620	US20150596056	20150113
WO06116718 A2	20061102	WO2006US16370	20060428
WO06116718 A3	20080117	WO2006US16370	20060428
WO07028035 A2	20070308	WO2006US34258	20060901
WO07028035 A3	20070607	WO2006US34258	20060901
WO13009777 A2	20130117	WO2012US46113	20120710
WO13009777 A3	20130321	WO2012US46113	20120710
WO13009779 A2	20130117	WO2012US46116	20120710
WO13009779 A3	20130418	WO2012US46116	20120710
WO13009781 A2	20130117	WO2012US46118	20120710
WO13009781 A3	20130404	WO2012US46118	20120710
WO13009782 A2	20130117	WO2012US46120	20120710
WO13009782 A3	20130314	WO2012US46120	20120710
WO13009786 A2	20130117	WO2012US46124	20120710
WO13009786 A3	20130411	WO2012US46124	20120710
WO13009788 A2	20130117	WO2012US46126	20120710
WO13009788 A3	20130314	WO2012US46126	20120710
WO13078405 A1	20130530	WO2012US66386	20121121
ZA201400334 A	20160428	ZA20140000334	20140116
ZA201400337 A	20151125	ZA20140000337	20140115
ZA201400338 A	20160727	ZA20140000338	20140116

Priority:

AU20120282776	20120710	AU20170202754	20170426	CA20062608144	20060428
CA20062789097	20060428	CA20062789262	20060428	CA20122608144	20120925
JP20080509195	20060428	EP20060751858	20060428	CA20122608144	20120925
JP20080529315	20060901	EP20120811051	20120710	EP20110006868	20060428
EP20120811425	20120710	CA20172789097	20170111	US20050676145	20050428
US20050713881P	20050901	US20050739174P	20051123	JP20110231159	20060428
JP20110231159	20120629	US20050676145P	20050428	US20050694078P	20050624
US20050713680P	20050901	JP20080529315T	20060901	JP20140125987	20060901
JP20160092292	20160502	US20050790335P	20050407	US20050694078	20050624
US20050713680	20050901	JP20140520264T	20120710	JP20170091953	20170502
US20060912475	20060428	US20060063095	20060901	US20090404184	20090313
US20100949720	20101118	US20050876145P	20050428	US20110153312	20110603
US20110180498	20110711	US20110180539	20110711	US20110180516	20110711
US20110180538	20110711	US20110180507	20110711	US20110180525	20110711
US20110304274	20111123	US20130874242	20130430	US20080063095	20080605
US20130059336	20131021	US20140260196	20140423	US20140308549	20140618
US20140308548	20140618	US20140485276	20140912	US20140341639	20140725
US20150596049	20150113	US20140552218	20141124	US20150596056	20150113
US20060790335P	20060407	US20090564017	20090921	US20080912475	20080623
US20150699681	20150429	US20150864277	20150924	US20150865508	20150925
US20060790335	20060407	US20170474811	20170330	WO2006US34258	20060901
WO2006US16370	20060428	WO2012US46113	20120710	WO2012US46118	20120710
WO2012US46120	20120710	WO2012US46126	20120710	WO2012US46116	20120710

Probable Assignee: PROTEUS BIOMEDICAL INC

Assignee(s): (std): AZEVEDO ROBERT ; BEHZADI YASHAR ; BERKMAN JEFFREY ; BJELETICH PETER ; COSTELLO BENEDICT ; DUCK ROBERT ; PIKELNY ALEKSANDR ; PROTEUS BIOMEDICAL INC ; HAFEZI HOOMAN ; MOON GREGORY ; PROTEUS DIGITAL HEALTH INC ; O REILLY DAVID ; HATAMKHANY ZAHEDAH ; JOHNSON PATRICIA ; FRANK JEREMY ; PESIC ILIYA ; ZDEBLICK MARK ; THOMPSON ANDREW ; ROBERTSON TIMOTHY ; ZDEBLICK MARK J ; WHITWORTH ADAM ; SAVAGE GEORGE ; THOMPSON TODD ; WITHRINGTON JONATHAN ; SNYDER ERIC

Assignee(s): O'REILLY DAVID ; PROTEUS DIGITAL HEALTH INC REDWOOD CITY

Inventor(s): (std): ADAM WHITWORTH ; AZEVEDO ROBERT ; BENEDICT COSTELLO ; BJELETICH PETER ; DAVID O REILLY ; DUCK ROBERT ; ERIC SNYDER ; FRANK JEREMY ; HAFEZI HOOMAN ; ILIYA PESIC ; JEFFREY BERKMAN ; JEREMY FRANK ; JONATHAN WITHRINGTON ; MARK J ZDEBLICK ; MOON GREGORY ; O REILLY DAVID ; HATAMKHANY ZAHEDAH ; OREILLY DAVID ; PATRICIA JOHNSON ; PESIC ILIYA ; PETER BJELETICH ; PIKELNY ALEXANDER ; ROBERT AZEVEDO ; ROBERT DUCK ; WHITWORTH ADAM ; ZAHEDAH HATAMKHANY ; ZDEBLICK MARK J ; ZDEBLICK MARK J J ; ANDREW THOMPSON ; ALEKSANDR PIKELNY ; ZDEBLICK MARK ; THOMPSON ANDREW ; ROBERTSON TIMOTHY ; PIKELNY ALEKSANDR ; HOOMAN HAFEZI ; WITHRINGTON JONATHAN ; JOHNSON PATRICIA ; BERKMAN JEFFREY ; THOMPSON TODD ; SAVAGE GEORGE ; COSTELLO BENEDICT ; BEHZADI YASHAR ; SNYDER ERIC ; TIMOTHY ROBERTSON ; MARK ZDEBLICK

Inventor(s): BERKMAN JEFFREY SARATOGA ; THOMPSON ANDREW PORTOLA VALLEY ; ZDEBLICK MARK PORTOLA VALLEY ; ZDEBLICK MARK J PORTOLA VALLEY ; WITHRINGTON JONATHAN SAN FRANCISCO ; ROBERTSON TIMOTHY BELMONT ; PIKELNY ALEKSANDR LOS ANGELES ; O'REILLY DAVID ; HATAMKHANY ZAHEDAH SAN MATEO ; O REILLY DAVID PALO ALTO ; JOHNSON PATRICIA PALO ALTO ; HAFEZI HOOMAN REDWOOD CITY

Agent(s): PIZZEYS ; K AND L GATES ; FB RICE ; FB RICE PTY LTD ; SMART AND BIGGAR ; GOWLING LAFLEUR HENDERSON LLP ; GOWLING WLG CANADA LLP ; MURGITROYD AND CO ; DUXBURY STEPHEN ET AL ; BOERNER ROBERT ; DUXBURY STEPHEN ; HYLARIDES PAUL JACQUES ; DE ELZABURU ALBERTO ; SANFORD TCOLB AND CO ; KOHNO TAKAO ; BOZICEVIC FIELD AND FRANCIS LLP PROTEUS BIOMEDICAL INC ; PROTEUS BIOMEDICAL INC BOZICEVIC FIELD AND FRANCIS LLP ; BOZICEVIC FIELD AND FRANCIS LLP ; BRET E ; K AND L GATES LLP ; FIELD BRET E

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

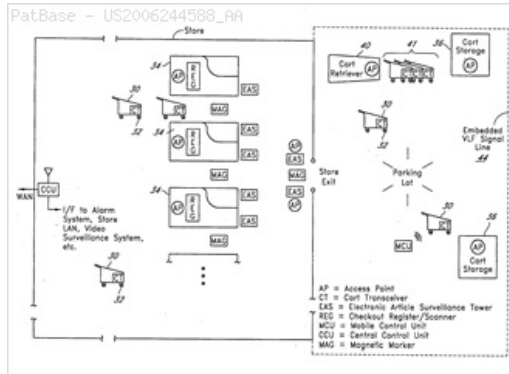
Abstract: Source: US2006244588A [EN] A vehicle tracking **system** includes a wheel containing sensor circuitry capable of sensing various types of conditions, such as wheel rotation, wheel vibration caused by skidding, and specific electromagnetic and/or magnetic signals indicative of particular wheel locations. The sensor circuitry is coupled to an RF transceiver, which may but need not be included within the wheel. The wheel may also include a brake mechanism. In one embodiment, the wheels are placed on shopping carts and are used to collect and monitor shopping cart status and location data via a wireless network. The collected data may be used for various purposes, such as locking the wheel of an exiting cart if the customer has not paid, estimating numbers of queued carts, stopping wheel skid events that occur during mechanized cart retrieval, store planning, and providing location-based messaging to customers.

International (AFC 8-9): A47F10/04 B23P11/00 B60B33/00 B60C23/00 B60K1/00 B60K13/02 B60K25/08 B60R25/09 B60R25/33 B60T7/12 B60T7/16 B60T7/18 B62B3/00 B62B3/14 B62B5/00 B62B5/04 E05B73/00 G01C17/00 G01C21/00 G01C21/12 G01C21/20 G01C22/00 G05D1/00 G06F19/00 G06F7/00 G06F7/70 G06K7/00 G06K7/08 G06K7/10 G06Q10/08 G08B1/08 G08B13/14 G08B13/24 G08B21/00 G08B5/22 G08G1/00 G08G1/123 H02K7/18 H04B17/318 H04B7/26 H04W4/02 (Advanced/Invention); A47F10/04 B60K25/08 B62B3/14 G05D1/02 G08G1/127 H01Q21/00 H02K7/102 (Advanced/Non-invention); B23P11/00 B60B33/00 B60C23/00 B60K1/00 B60K13/00 B62B5/00 G01C17/00 G01C21/00 G06F19/00 G06F7/00 G06K7/00 G08B1/00 G08B13/14 G08B5/22 G08G1/123 (Core/Invention)

CPC: B62B5/0423 B60T7/18 G01C21/00 G01C21/12 G06Q10/08
G08B13/2434 G08B13/2448 G08B13/2482 G08G1/20 H02K7/1846
B62B5/048 Y10T16/195 Y10T29/49826 A47F10/04 B60K25/08
B60T7/16 B62B3/14 B62B3/1424 B62B5/0003 B62B3/1492
H04W4/02 G01C21/206 B62B3/1412 G06K7/10366 G08B13/2474
B62B3/1404 H04W4/028 H04W4/029

European: A47F10/04 B60T7/18 B62B3/14B B62B5/04A7 G01C21/00 G01C21/12 G06Q10/08 G08B13/24B3H G08B13/24B3U G08B13/24B7M G08G1/20 H02K7/18A3 L60K25/08 L62B3/14 L62B5/04X

US: 1/1 16/35.00RS 16/35R 180/197 180/65.5 180/65.51 180/65.510P 188/19 280/33.994 280/33.994P 280/33.994S 29/428 29/428S 340/10.5 340/10.500P 340/505 340/506 340/539.1 340/539.13 340/539.130P 340/568.5 340/568.500P 340/572.1 340/572.100P 340/573.3 340/573.4 340/574 340/674 340/7.2 340/8.1 340/8.100S 340/825.36 340/825.47 340/988 340/988P 701/1 701/118 701/1S 701/2 701/200 701/200P 701/215 701/220 701/220S 701/23 701/33.4 701/33.400S 701/35 701/35S 701/400 701/408 701/412 701/422 701/425 701/434 701/435 701/469 701/470 701/472 701/498 701/498P 701/519 701/541 701/70 701/70P 701/71



Publication number	Publication date	Application number	Application date
CA2601565 AA	20070917	CA20062601565	20060320
CA2601565 C	20151027	CA20062601565	20060320
CA2601569 AA	20070917	CA20062601569	20060320
CA2601569 C	20150818	CA20062601569	20060320
CA2601572 AA	20070917	CA20062601572	20060320
CA2891641 AA	20060928	CA20062891641	20060320
CA2891641 C	20180102	CA20062891641	20060320
CA2896121 AA	20060928	CA20062896121	20060320
CA2896121 C	20160830	CA20062896121	20060320
CA2934721 AA	20060928	CA20062934721	20060320
CA2934724 AA	20060928	CA20062934724	20060320
CA2934736 AA	20060928	CA20062934736	20060320
CA2934736 C	20171017	CA20062934736	20060320
CN101171147 A	20080430	CN200680013809	20060320
CN101171147 B	20110706	CN200680013809	20060320
CN101176127 A	20080507	CN200680016621	20060320
CN101176127 B	20110615	CN200680016621	20060320
DE602006043268 D1	20141120	DE200660043268T	20060320
EP1863656 A2	20071212	EP20060758183	20060320
EP1863656 A4	20160601	EP20060758183	20060320
EP1863656 B1	20180110	EP20060758183	20060320
EP1864082 A2	20071212	EP20060748454	20060320
EP1864082 A4	20150225	EP20060748454	20060320
EP1864082 B1	20161026	EP20060748454	20060320
EP1869405 A2	20071226	EP20060739105	20060320
EP1869405 A4	20101215	EP20060739105	20060320
EP1869405 B1	20141008	EP20060739105	20060320
EP3138701 A1	20170308	EP20160179514	20060320
EP3138702 A1	20170308	EP20160179519	20060320
ES2605370 T3	20170314	ES20060748454T	20060320
HK1117934 A3	20090123	HK20080107433	20080707
US2006244588 AA	20061102	US20060277016	20060320
US2006247847 AA	20061102	US20060277027	20060320
US2006249320 AA	20061109	US20060277029	20060320
US2008314667 AA	20081225	US20080200735	20080828
US2008315540 AA	20081225	US20080200825	20080828
US2008316029 AA	20081225	US20080200804	20080828
US2008316059 AA	20081225	US20080200833	20080828
US2008319625 AA	20081225	US20080200771	20080828
US2009002160 AA	20090101	US20080202075	20080829
US2009002172 AA	20090101	US20080202044	20080829
US2009322492 AA	20091231	US20090552118	20090901

US2012035823 AA	20120209	US20110209219	20110812
US2013214502 AA	20130822	US20130850220	20130325
US2013238169 AA	20130912	US20130857006	20130404
US2013249177 AA	20130926	US20130903733	20130528
US2013257000 AA	20131003	US20130907351	20130531
US2013261943 AA	20131003	US20130903743	20130528
US2013264786 AA	20131010	US20130907502	20130531
US2014125019 AA	20140508	US20130907489	20130531
US2014350851 AA	20141127	US20140299957	20140609
US2015197266 AA	20150716	US20140470617	20140827
US2015325093 AA	20151112	US20150699221	20150429
US2015344055 AA	20151203	US20150821244	20150807
US2016288811 AA	20161006	US20160093545	20160407
US2016332653 AA	20161117	US20160191303	20160623
US2018009458 AA	20180111	US20170440264	20170223
US2018037246 AA	20180208	US20170468581	20170324
US8046160 BB	20111025	US20060277027	20060320
US8406993 BB	20130326	US20080200771	20080828
US8417445 BB	20130409	US20080202044	20080829
US8433507 BB	20130430	US20080202075	20080829
US8463540 BB	20130611	US20060277016	20060320
US8473192 BB	20130625	US20080200833	20080828
US8478471 BB	20130702	US20080200804	20080828
US8558698 BA	20131015	US20130903733	20130528
US8570171 BB	20131029	US20130857006	20130404
US8571778 BB	20131029	US20130850220	20130325
US8606501 BB	20131210	US20080200735	20080828
US8700230 BA	20140415	US20130907489	20130531
US8718923 BB	20140506	US20130903743	20130528
US8751148 BB	20140610	US20110209219	20110812
US8820447 BB	20140902	US20060277029	20060320
US9091551 BB	20150728	US20090552118	20090901
US9322658 BB	20160426	US20150821244	20150807
US9586606 BB	20170307	US20140470617	20140827
US9630639 BB	20170425	US20140299957	20140609
US9637151 BB	20170502	US20150699221	20150429
US9676405 BB	20170613	US20160093545	20160407
US9758185 BB	20170912	US20130907502	20130531
US9783218 BB	20171010	US20130907351	20130531
US9914470 BB	20180313	US20160191303	20160623
WO06102183 A2	20060928	WO2006US09921	20060320
WO06102183 A3	20071129	WO2006US09921	20060320
WO06102300 A2	20060928	WO2006US10175	20060320
WO06102300 A3	20071206	WO2006US10175	20060320
WO06102561 A2	20060928	WO2006US10686	20060320
WO06102561 A3	20071025	WO2006US10686	20060320

Priority:

CA20062601565	20060320	CA20062601569	20060320	CA20152601569	20150522
CA20152601565	20150713	CA20162896121	20160708	CA20062896121	20060320
US20060277016	20060320	US20050663147P	20050318	US20050663327P	20050318
US20050663195P	20050318	US20060277027	20060320	EP20060739105	20060320
EP20060748454	20060320	EP20060748454	20060320	US20080200735	20080828
US20080200825	20080828	US20080200833	20080828	US20080200804	20080828
US20080200771	20080828	US20080202075	20080829	US20080202044	20080829
US20090552118	20090901	US20110209219	20110812	US20060277029	20060320
US20130850220	20130325	US20130857006	20130404	US20130903733	20130528
US20130907351	20130531	US20130903743	20130528	US20130907489	20130531
WO2006US10175	20060320	WO2006US09921	20060320	WO2006US10686	20060320
US20130907502	20130531	US20140299957	20140609	US20140470617	20140827
US20150699221	20150429	US20150821244	20150807	US20160093545	20160407
US20160191303	20160623	US20170440264	20170223	US20170468581	20170324

Probable Assignee: GATEKEEPER SYSTEMS INC

Assignee(s): (std): CARTER SCOTT J ; GATEKEEPER SYSTEMS INC ; GATESKEEPER SYSTEMS INC ; HANNAH STEPHEN E ; JAMES JESSE M

Assignee(s): GATEKEEPER SYSTEMS INC IRVINE ; FIRST MERCHANTS BANK

Inventor(s): (std): JAMES JESSE MICHAEL ; JAMES JESSE M ; HANNAH STEPHEN E ; CARTER SCOTT J

Inventor(s): CARTER SCOTT ; HANNAH STEPHEN ; JAMES JESSE ; CARTER SCOTT J SEAL BEACH ; HANNAH STEPHEN E PLACENTIA ; JAMES JESSE M LADERA RANCH

Agent(s): SMART AND BIGGAR; GROSSE SCHUMACHER KNAUER VON HIRSCHHAUSEN; FENNEL GARETH CHARLES; ISERN JORGE; KNOBBE MARTENS OLSON AND BEAR LLP; OFFICE OF CORPORATE LIAISON, AND TECHNOLOGY TRANSFER; OFFICE OF CORPORATE LIAISON AND TECHNOLOGY TRANSFER

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 KN 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

Title: NETWORK **SYSTEM** AND METHOD OF CONTROLLING NETWORK **SYSTEM**

Abstract: Source: US2012271471A [EN] A method of controlling a network **system** is provided. The network **system** includes a metering **device** measuring energy supplied from a power supply source, a communication **device** in which energy information related to the energy communicates, and an energy management **device** recognizing the energy information, the energy management **device** controlling an operation of an electric product. The metering **device** or the energy management **device** checks whether communication of the communication **device** is possible. Also, when it is determined that the communication **device** is in a communication failure state, the communication failure state is displayed on the outside thereof. When a communication modem mounted on the electric product is in a communication failure state, the electric product may normally perform a power management program, based on power or operation information stored therein.

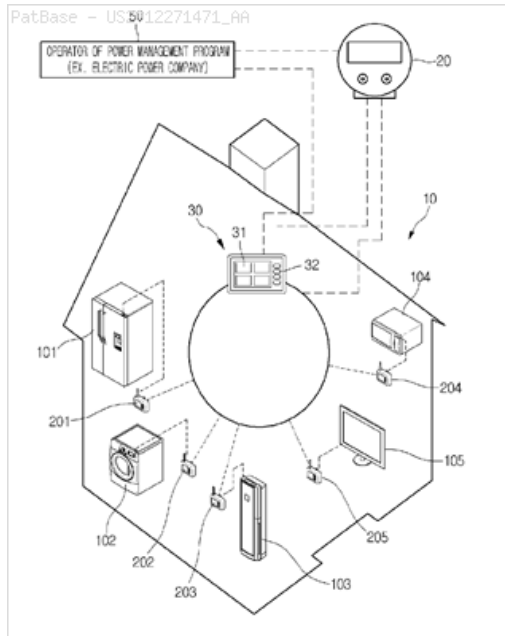
Classifications:

International (IPC 8-9): A47L15/00 A47L15/42 A47L9/28 B01D35/04 B60L11/00 B60L9/00 D06F33/02 D06F37/30 D06F39/00 F24C7/08 F24F11/02 G01R11/00 G01R11/56 G01R11/64 G01R21/00 G01R21/133 G01R22/00 G01R22/06 G01R31/36 G05B11/01 G05B13/02 G05B15/00 G05B15/02 G05D17/00 G05D3/12 G05D7/00 G05F1/10 G05F5/00 G06F1/00 G06F1/26 G06F1/28 G06F1/32 G06F11/30 G06F15/16 G06F15/167 G06F3/048 G06F7/00 G06F9/44 G06Q10/00 G06Q10/04 G06Q10/06 G06Q10/10 G06Q30/00 G06Q50/00 G06Q50/06 G06Q50/26 G08B25/06 G08C19/02 G08C25/00 H02J11/00 H02J13/00 H02J15/00 H02J3/14 H02J3/28 H02J3/32 H02J3/38 H02J3/46 H02J4/00 H02J7/00 H02J7/35 H02J9/00 H02P1/00 H02P29/00 H04L12/10 H04L12/12 H04L12/14 H04L12/16 H04L12/24 H04L12/26 H04L12/28 H04L12/66 H04L29/06 H04Q1/24 H04Q9/04 (Advanced/Invention); B01D35/04 G06F9/44 G06Q10/00 H02J3/00 H02J3/14 H02J3/32 H02J3/38 H04L12/26 (Advanced/Non-invention)

CPC: Y02B70/3233 Y04S20/225 G06Q10/0631 H02P29/00 Y02B90/2684 Y04S40/143 Y02B40/42 G06F1/28 G06F1/3206 H04L12/2807 Y02B90/2669 Y04S40/128 G05B13/02 H04L65/1069 H04L41/0226 H04L12/283 H04L2012/2843 G06F9/45512 H02J2003/003 H02J9/002 A47L2501/02 A47L2501/05 H04L67/125 H04L67/12 G06F11/3065 G06F11/3058 H04L12/2823 H04L67/02 H04L12/282 H04L67/2823 G05B15/02 Y04S20/44 G06F1/26 H02J7/0004 H04L12/2809 H04L12/2827 Y02E70/30 H02J3/387 H02J3/381 H02J2003/007 Y02E60/76 Y04S10/12 Y04S40/22 H04L12/2825 H04L43/0817 H02J3/382 H02J7/35 G06Q10/06312 H02J4/00 A47L15/4293 H04L12/2818 H04L12/66 Y10T307/406 Y10T307/766 Y04S40/168 H04L12/16 Y02B70/30 H04L12/14 G06F3/048 H04Q9/04 H04W52/00 G01R11/64 G08B25/06 Y04S10/545 G06Q20/145 H02J13/0096 H02J2007/0098 H02J3/32 H02J3/383 H02J3/386 H02J3/46 H02J13/0024 H02J13/0062 H02J13/0075 H02J13/0086 Y02B90/2623 Y02B90/2638 Y02B90/2653 Y02E10/563 Y02E10/566 Y02E10/763 Y02E40/72 Y04S10/123 Y04S40/122 Y04S40/124 Y04S40/126 H04L12/2816 H04L12/2834 H04L2012/285 Y02B90/222 Y02B90/244 Y02B90/246 Y04S20/12 Y04S20/327 Y04S20/42 G06Q30/00 H04L41/0833 Y02B70/3216 Y04S20/221 Y04S40/162 H02J13/001 H04L41/00 Y04S10/40 H04L12/2814 H02J9/005 Y02B40/50 G06Q50/26 G01R22/00 H02J13/00 G06Q50/00 H04L12/10 D06F37/304 D06F2204/065 H04Q1/24 G06Q30/016 Y04S10/54 G01R11/56 G01R21/1333 G08C19/02 H04L12/28 H02J3/008 Y04S50/10 D06F2216/00 G06Q10/10 G06Q50/06 G06Q10/04 G06Q10/06 Y10T307/50 H02J3/28 H02J13/0006 Y02P90/84 G01R22/06 B01D35/04 G06F1/32 G05F1/10 F24C7/082 H02J11/00 F24C7/087 A47L9/28 Y04S20/30 Y04S20/244 H02J5/00 H02J7/02 B01D35/14 B01D37/04 A47L9/2868 A47L9/2857 A47L9/327 H02J13/0055 Y02B70/325 Y04S20/228 H04L12/12 H04L12/2803 F24F11/30 F24F11/62 F24F2140/60 Y02D50/20 Y02D50/10 A47L15/0047 A47L15/0063 A47L2401/30 A47L2401/34 D06F33/02 D06F39/005 D06F2202/12 D06F2204/10 D06F2212/02 H02J3/14 H02J13/0079 H02J2003/143 H02J2003/146 Y02B70/3225 Y02B70/3266 Y04S20/222 Y04S20/224 Y04S20/242 Y02D50/40 F24F11/58 F24F11/47

European: A47L15/00C16 A47L15/00C4 D06F33/02 D06F39/00P G06F9/455B2B G06Q10/06 G06Q30/00 G06Q50/06 H02J13/00F4D H02J3/00T H02J3/14 H02J3/32 H02J3/38D1 H02J3/46 H02J9/00R H04L12/10 H04L12/12 H04L12/24 H04L12/24E1B3C H04L12/26M3A2 H04L12/28H H04L12/28H2 H04L12/28H2A H04L12/28H3 H04L12/28H3A H04L12/28H4A H04L12/28H4B H04L12/28H5 H04L12/66 H04L41/00 H04L41/08A3C H04L43/08D K47L15/00C16 K47L401/30 K47L401/34 T02J3/00L T02J3/14H T02J3/14T T04L12/28H10B Y02B60/34 Y02B70/32B2 Y02B70/32D2 Y02B70/32D2B Y02B90/26B10 Y04S20/22B Y04S20/24B Y04S20/24B2 Y04S40/12J

US: 1/1 307/116 307/31 307/43 318/445 700/1 700/17 700/19 700/22 700/286 700/291 700/292 700/295 700/296 700/297 701/22 701/24 705/7.12 709/201 709/213 709/217 709/224 709/227

**Family:**

Publication number	Publication date	Application number	Application date
AU2010322810 AA	20110603	AU20100322810	20101126
AU2010322810 AH	20150226	AU20100322810	20101126
AU2010322810 BB	20150212	AU20100322810	20101126
AU2010322810 BH	20150226	AU20100322810	20101126
CA2781653 AA	20110603	CA20102781653	20101126
CA2781653 C	20160906	CA20102781653	20101126
CN102640458 A	20120815	CN201080053780	20101126
CN102640458 B	20150930	CN201080053780	20101126
CN102687463 A	20120919	CN201080059702	20101126
CN102687463 B	20150930	CN201080059702	20101126
CN102870369 A	20130109	CN201080066599	20100505
CN102870369 B	20160309	CN201080066599	20100505
CN102870370 A	20130109	CN201080066606	20100505
CN102870370 B	20161012	CN201080066606	20100505
CN102939735 A	20130220	CN201080067334	20100610
CN102939735 B	20160504	CN201080067334	20100610
CN103004136 A	20130327	CN201180035180	20110624
CN103004136 B	20150930	CN201180035180	20110624
CN103004137 A	20130327	CN201180035239	20110627
CN103004138 A	20130327	CN201180035581	20110622
CN103004138 B	20170517	CN201180035581	20110622
CN103155484 A	20130612	CN201180035825	20110627
DE602010028309 D1	20151126	DE201060028309T	20101126

DE602011013571 D1	20150319	DE201160013571T	20110624
DE602011014187 D1	20150409	DE201160014187T	20110715
DE602011014452 D1	20150416	DE201160014452T	20110622
DE602011015271 D1	20150513	DE201160015271T	20110217
DE602011015554 D1	20150521	DE201160015554T	20110627
DE602011015758 D1	20150528	DE201160015758T	20110622
DE602011017279 D1	20150730	DE201160017279T	20110804
EP2504807 A2	20121003	EP20100832724	20101126
EP2504807 A4	20131030	EP20100832724	20101126
EP2514142 A2	20121024	EP20100837797	20101126
EP2514142 A4	20140101	EP20100837797	20101126
EP2514142 B1	20151014	EP20100837797	20101126
EP2537078 A1	20121226	EP20110745218	20110217
EP2537078 A4	20140430	EP20110745218	20110217
EP2537349 A1	20121226	EP20110745216	20110217
EP2537349 A4	20130911	EP20110745216	20110217
EP2537349 B1	20150401	EP20110745216	20110217
EP2539812 A1	20130102	EP20110747950	20110223
EP2539812 A4	20140423	EP20110747950	20110223
EP2568656 A1	20130313	EP20100851069	20100505
EP2568656 A4	20140305	EP20100851069	20100505
EP2568657 A1	20130313	EP20100851070	20100505
EP2568657 A4	20140305	EP20100851070	20100505
EP2582094 A1	20130417	EP20100852933	20100610
EP2582094 A4	20140402	EP20100852933	20100610
EP2587445 A2	20130501	EP20110798387	20110622
EP2587445 A4	20131009	EP20110798387	20110622
EP2587445 B1	20150415	EP20110798387	20110622
EP2587719 A2	20130501	EP20110798391	20110622
EP2587719 A4	20131009	EP20110798391	20110622
EP2587726 A2	20130501	EP20110798386	20110622
EP2587726 A4	20130925	EP20110798386	20110622
EP2587727 A2	20130501	EP20110798388	20110622
EP2587727 A4	20131016	EP20110798388	20110622
EP2587727 B1	20150304	EP20110798388	20110622
EP2587728 A2	20130501	EP20110798389	20110622
EP2587728 A4	20131002	EP20110798389	20110622
EP2587729 A2	20130501	EP20110798411	20110624
EP2587729 A4	20131127	EP20110798411	20110624
EP2587729 B1	20150128	EP20110798411	20110624
EP2587730 A2	20130501	EP20110798412	20110624
EP2587730 A4	20140326	EP20110798412	20110624
EP2587731 A2	20130501	EP20110798415	20110627
EP2587731 A4	20140611	EP20110798415	20110627
EP2587731 B1	20160928	EP20110798415	20110627
EP2587732 A2	20130501	EP20110798419	20110627
EP2587732 A4	20140305	EP20110798419	20110627
EP2587733 A2	20130501	EP20110798420	20110627
EP2587733 A4	20140305	EP20110798420	20110627
EP2587734 A2	20130501	EP20110798421	20110627
EP2587734 A4	20131204	EP20110798421	20110627
EP2587734 B1	20150408	EP20110798421	20110627
EP2594674 A2	20130522	EP20110807084	20110715
EP2594674 A4	20131225	EP20110807084	20110715
EP2594674 B1	20150225	EP20110807084	20110715
EP2616892 A1	20130724	EP20110825603	20110804
EP2616892 A4	20140319	EP20110825603	20110804
EP2616892 B1	20150617	EP20110825603	20110804
ES2535954 T3	20150519	ES20110807084T	20110715
KR101069058 B1	20110929	KR20100014133	20100217
KR101101522 B1	20120104	KR20100016032	20100223
KR101101547 B1	20120102	KR20100016026	20100223
KR101101657 B1	20111230	KR20100014154	20100217
KR101134183 B1	20120419	KR20100016936	20100225
KR101139584 B1	20120427	KR20100014151	20100217
KR101148250 B1	20120521	KR20100020599	20100309
KR101158615 B1	20120622	KR20100014145	20100217
KR101163316 B1	20120705	KR20100072167	20100727
KR101166624 B1	20120718	KR20100014125	20100217
KR101542409 B1	20150812	KR20090115203	20091126
KR101542410 B1	20150812	KR20090126362	20091217
KR101556164 B1	20151013	KR20090126364	20091217
KR101578009 B1	20151216	KR20090126375	20091217
KR101605910 B1	20160323	KR20100060889	20100626
KR101608997 B1	20160404	KR20100069198	20100716
KR101617469 B1	20160503	KR20100091436	20100917
KR101625689 B1	20160530	KR20100058918	20100622
KR101634815 B1	20160629	KR20100069197	20100716
KR101644654 B1	20160801	KR20100069192	20100716
KR101645489 B1	20160805	KR20090126377	20091217
KR101648224 B1	20160812	KR20100058922	20100622

KR101656884 B1	20160912	KR20100060880	20100626
KR101660539 B1	20160927	KR20100060880	20100626
KR101660540 B1	20160927	KR20100069194	20100716
KR101668701 B1	20161024	KR20100065824	20100708
KR101671031 B1	20161031	KR20100069195	20100716
KR101674938 B1	20161122	KR20090126376	20091217
KR101677765 B1	20161118	KR20100058921	20100622
KR101677766 B1	20161118	KR20100069196	20100716
KR101677767 B1	20161118	KR20100091439	20100917
KR101678439 B1	20161206	KR20100091487	20100917
KR101687026 B1	20161215	KR20100091435	20100917
KR101687027 B1	20161215	KR20100091437	20100917
KR101721873 B1	20170331	KR20100060593	20100625
KR101725544 B1	20170410	KR20100081170	20100823
KR101733487 B1	20170510	KR20100060592	20100625
KR101746221 B1	20170612	KR20100069193	20100716
KR101751067 B1	20170626	KR20110001543	20110106
KR101759747 B1	20170719	KR20110033952	20110412
KR101760522 B1	20170721	KR20110033953	20110412
KR101788861 B1	20171020	KR20100091440	20100917
KR101796317 B1	20171110	KR20100060887	20100626
KR101796319 B1	20171110	KR20100128416	20101215
KR101799105 B1	20171117	KR20110001542	20110106
KR101801978 B1	20171127	KR20100128144	20101215
KR101801982 B1	20171127	KR20110047568	20110519
KR101820163 B1	20180118	KR20100060898	20100626
KR101821815 B1	20180124	KR20110001546	20110106
KR20110058418 A	20110601	KR20090115203	20091126
KR20110069574 A	20110623	KR20090126360	20091217
KR20110069575 A	20110623	KR20090126362	20091217
KR20110069576 A	20110623	KR20090126364	20091217
KR20110069582 A	20110623	KR20090126375	20091217
KR20110069583 A	20110623	KR20090126376	20091217
KR20110069584 A	20110623	KR20090126377	20091217
KR20110094604 A	20110824	KR20100014125	20100217
KR20110094610 A	20110824	KR20100014133	20100217
KR20110094617 A	20110824	KR20100014145	20100217
KR20110094621 A	20110824	KR20100014151	20100217
KR20110094622 A	20110824	KR20100014154	20100217
KR20110096667 A	20110831	KR20100016026	20100223
KR20110096671 A	20110831	KR20100016032	20100223
KR20110097213 A	20110831	KR20100016936	20100225
KR20110101539 A	20110916	KR20100020599	20100309
KR20110138811 A	20111228	KR20100058918	20100622
KR20110138813 A	20111228	KR20100058920	20100622
KR20110138814 A	20111228	KR20100058921	20100622
KR20110138815 A	20111228	KR20100058922	20100622
KR20110139040 A	20111228	KR20100059280	20100622
KR20120000005 A	20120103	KR20100060880	20100626
KR20120000006 A	20120103	KR20100060881	20100626
KR20120000008 A	20120103	KR20100060883	20100626
KR20120000010 A	20120103	KR20100060885	20100626
KR20120000011 A	20120103	KR20100060886	20100626
KR20120000012 A	20120103	KR20100060887	20100626
KR20120000013 A	20120103	KR20100060888	20100626
KR20120000014 A	20120103	KR20100060889	20100626
KR20120000016 A	20120103	KR20100060891	20100626
KR20120000017 A	20120103	KR20100060892	20100626
KR20120000018 A	20120103	KR20100060893	20100626
KR20120000019 A	20120103	KR20100060894	20100626
KR20120000023 A	20120103	KR20100060898	20100626
KR20120000024 A	20120103	KR20100060899	20100626
KR20120000025 A	20120103	KR20100060900	20100626
KR20120000027 A	20120103	KR20100060902	20100626
KR20120000029 A	20120103	KR20100060904	20100626
KR20120000031 A	20120103	KR20100060906	20100626
KR20120000033 A	20120103	KR20100060908	20100626
KR20120000295 A	20120102	KR20100060590	20100625
KR20120000297 A	20120102	KR20100060592	20100625
KR20120000298 A	20120102	KR20100060593	20100625
KR20120005203 A	20120116	KR20100065824	20100708
KR20120008373 A	20120130	KR20100069192	20100716
KR20120008374 A	20120130	KR20100069193	20100716
KR20120008375 A	20120130	KR20100069194	20100716
KR20120008376 A	20120130	KR20100069195	20100716
KR20120008377 A	20120130	KR20100069196	20100716
KR20120008378 A	20120130	KR20100069197	20100716
KR20120008379 A	20120130	KR20100069198	20100716
KR20120010686 A	20120206	KR20100072167	20100727
KR20120018401 A	20120305	KR20100081170	20100823
KR20120029565 A	20120327	KR20100091435	20100917

KR20120029566 A	20120327	KR20100091436	20100917
KR20120029567 A	20120327	KR20100091437	20100917
KR20120029568 A	20120327	KR20100091438	20100917
KR20120029569 A	20120327	KR20100091439	20100917
KR20120029570 A	20120327	KR20100091440	20100917
KR20120029596 A	20120327	KR20100091487	20100917
KR20120066848 A	20120625	KR20100128144	20101215
KR20120067027 A	20120625	KR20100128416	20101215
KR20120067033 A	20120625	KR20100128422	20101215
KR20120080085 A	20120716	KR20110001541	20110106
KR20120080086 A	20120716	KR20110001542	20110106
KR20120080087 A	20120716	KR20110001543	20110106
KR20120080090 A	20120716	KR20110001546	20110106
KR20120116301 A	20121022	KR20110033952	20110412
KR20120116302 A	20121022	KR20110033953	20110412
KR20120128735 A	20121128	KR20110046475	20110517
KR20120129366 A	20121128	KR20110047569	20110519
KR20120129467 A	20121128	KR20110047731	20110520
KR20120129527 A	20121128	KR20110047838	20110520
KR20120137598 A	20121224	KR20110047568	20110519
US2012271471 AA	20121025	US20100516492	20101026
US2012271471 AA	20121025	US20100516492	20101126
US2012290142 AA	20121115	US20100512195	20101126
US2012296489 AA	20121122	US20100511894	20101126
US2012303172 AA	20121129	US20100516509	20101126
US2012310437 AA	20121206	US20110579430	20110217
US2012310463 AA	20121206	US20110579445	20110217
US2013018520 AA	20130117	US20110580266	20110223
US2013030553 AA	20130131	US20100516522	20101126
US2013134781 AA	20130530	US20110579439	20110217
US2013181649 AA	20130718	US20110810525	20110715
US2013197703 AA	20130801	US20110806583	20110627
US2013204444 AA	20130808	US20110806920	20110627
US2013204449 AA	20130808	US20110806730	20110627
US2013211612 AA	20130815	US20110806472	20110624
US2013221749 AA	20130829	US20110824109	20110804
US2013226361 AA	20130829	US20110824096	20110823
US2013227150 AA	20130829	US20110806569	20110622
US2013245841 AA	20130919	US20110806660	20110627
US2013245851 AA	20130919	US20110805510	20110622
US2013274937 AA	20131017	US20110806560	20110622
US2013274938 AA	20131017	US20110806924	20110624
US2013304271 AA	20131114	US20110810575	20110712
US2013317662 AA	20131128	US20110805514	20110622
US2013331997 AA	20131212	US20110806689	20110627
US2013332002 AA	20131212	US20110806551	20110622
US2014040458 AA	20140206	US20110806522	20110627
US2014148925 AA	20140529	US20110806733	20110624
US2014222168 AA	20140807	US20110806577	20110622
US2014303801 AA	20141009	US20110806716	20110627
US2017116688 AA	20170427	US20160376339	20161212
US8798834 BB	20140805	US20110579445	20110217
US8914133 BB	20141216	US20100516509	20101126
US9129241 BB	20150908	US20110810525	20110715
US9294298 BB	20160322	US20100516492	20101126
US9337658 BB	20160510	US20110579439	20110217
US9350174 BB	20160524	US20110806716	20110627
US9373095 BB	20160621	US20110806689	20110627
US9386905 BB	20160712	US20110579430	20110217
US9405280 BB	20160802	US20110806920	20110627
US9417616 BB	20160816	US20110805514	20110622
US9491005 BB	20161108	US20100512195	20101126
US9494993 BB	20161115	US20110806472	20110624
US9513613 BB	20161206	US20110806577	20110622
US9595831 BB	20170314	US20110824109	20110804
US9667070 BB	20170530	US20110810575	20110712
US9685784 BB	20170620	US20100511894	20101126
US9690684 BB	20170627	US20110806522	20110627
US9696773 BB	20170704	US20110805510	20110622
US9836803 BB	20171205	US20110806924	20110624
WO11064671 A2	20110603	WO2010IB03388	20101126
WO11064671 A3	20110901	WO2010IB03388	20101126
WO11065775 A2	20110603	WO2010KR08435	20101126
WO11065775 A3	20111110	WO2010KR08435	20101126
WO11074798 A2	20110623	WO2010KR08430	20101126
WO11074798 A3	20111110	WO2010KR08430	20101126
WO11074799 A2	20110623	WO2010KR08431	20101126
WO11074799 A3	20111110	WO2010KR08431	20101126
WO11074800 A2	20110623	WO2010KR08434	20101126
WO11074800 A3	20111110	WO2010KR08434	20101126
WO11103275 A1	20110825	WO2011US25219	20110217

WO11103228 A1	20110825	WO2011US25237	20110217
WO11106355 A1	20110901	WO2011US25824	20110223
WO11138981 A1	20111110	WO2010KR02851	20100505
WO11138982 A1	20111110	WO2010KR02852	20100505
WO11155647 A1	20111215	WO2010KR03750	20100610
WO11162551 A2	20111229	WO2011KR04573	20110622
WO11162551 A3	20120315	WO2011KR04573	20110622
WO11162552 A2	20111229	WO2011KR04574	20110622
WO11162552 A3	20120503	WO2011KR04574	20110622
WO11162553 A2	20111229	WO2011KR04575	20110622
WO11162553 A3	20120503	WO2011KR04575	20110622
WO11162554 A2	20111229	WO2011KR04576	20110622
WO11162554 A3	20120216	WO2011KR04576	20110622
WO11162555 A2	20111229	WO2011KR04577	20110622
WO11162555 A3	20120412	WO2011KR04577	20110622
WO11162556 A2	20111229	WO2011KR04578	20110622
WO11162556 A3	20120419	WO2011KR04578	20110622
WO11162576 A2	20111229	WO2011KR04640	20110624
WO11162576 A3	20120419	WO2011KR04640	20110624
WO11162577 A2	20111229	WO2011KR04642	20110624
WO11162577 A3	20120503	WO2011KR04642	20110624
WO11162578 A2	20111229	WO2011KR04643	20110624
WO11162578 A3	20120503	WO2011KR04643	20110624
WO11162579 A2	20111229	WO2011KR04650	20110627
WO11162579 A3	20120412	WO2011KR04650	20110627
WO11162580 A2	20111229	WO2011KR04651	20110627
WO11162580 A3	20120503	WO2011KR04651	20110627
WO11162581 A2	20111229	WO2011KR04652	20110627
WO11162581 A3	20120503	WO2011KR04652	20110627
WO11162584 A2	20111229	WO2011KR04657	20110627
WO11162584 A3	20120412	WO2011KR04657	20110627
WO11162585 A2	20111229	WO2011KR04658	20110627
WO11162585 A3	20120412	WO2011KR04658	20110627
WO11162586 A2	20111229	WO2011KR04663	20110627
WO11162586 A3	20120412	WO2011KR04663	20110627
WO11162587 A2	20111229	WO2011KR04664	20110627
WO11162587 A3	20120503	WO2011KR04664	20110627
WO12008799 A2	20120119	WO2011KR05234	20110715
WO12008799 A3	20120531	WO2011KR05234	20110715
WO12009340 A1	20120119	WO2011US43685	20110712
WO12036799 A1	20120322	WO2011US46583	20110804
WO12036851 A2	20120322	WO2011US48741	20110823
WO12036851 A3	20140320	WO2011US48741	20110823

Priority:

EP20100837797	20101126	EP20110745216	20110217	EP20110798388	20110622
EP20110798421	20110627	EP20110798387	20110622	EP20110798411	20110624
KR20090115203	20091126	KR20090126362	20091217	KR20090126364	20091217
KR20090126376	20091217	KR20090126375	20091217	KR20090126360	20091217
EP20110807084	20110715	EP20110825603	20110804	KR20090126377	20091217
KR20100014151	20100217	KR20100016026	20100223	KR20100014125	20100217
KR20100014145	20100217	KR20100014133	20100217	KR20100020599	20100309
KR20100014154	20100217	KR20100058921	20100622	KR20100059280	20100622
KR20100058920	20100622	KR20100058918	20100622	KR20100058922	20100622
KR20100016032	20100223	KR20100016936	20100225	KR20100002851	20100505
KR20100060889	20100626	KR20100060893	20100626	KR20100069192	20100716
KR20100065824	20100708	KR20100060892	20100626	KR20100072167	20100727
KR20100069194	20100716	KR20100060887	20100626	KR20100060590	20100625
KR20100060906	20100626	KR20100060880	20100626	KR20100060908	20100626
KR20100060881	20100626	KR20100060904	20100626	KR20100060899	20100626
KR20100060888	20100626	KR20100060894	20100626	KR20100060883	20100626
KR20100060886	20100626	KR20100060885	20100626	KR20100060902	20100626
KR20100060898	20100626	KR20100060891	20100626	KR20100060900	20100626
KR20100060593	20100625	KR20100060592	20100625	KR20100081170	20100823
KR20100069193	20100716	KR20100069197	20100716	KR20100069198	20100716
KR20100069196	20100716	KR20100069195	20100716	WO2010KR02851	20100505
WO2010KR02852	20100505	WO2010KR03750	20100610	KR20100091487	20100917
WO2010IB03388	20101126	KR20110001541	20110106	KR20110001542	20110106
KR20100128422	20101215	KR20110047569	20110519	KR20110047731	20110520
KR20100128144	20101215	KR20100128416	20101215	KR20110047838	20110520
KR20100091439	20100917	KR20110001543	20110106	KR20110047568	20110519
KR20100091438	20100917	KR20110046475	20110517	KR20110001546	20110106
KR20110033953	20110412	KR20110033952	20110412	KR20100091436	20100917
KR20100091435	20100917	KR20100091437	20100917	KR20100091440	20100917
WO2010KR08434	20101126	WO2010KR08434	20101026	WO2010KR08435	20101126
WO2010KR08431	20101126	WO2011US25219	20110217	WO2011US25235	20110217
WO2011US25227	20110217	WO2011KR04642	20110624	WO2011KR04651	20110627
WO2011KR04575	20110622	WO2011US25824	20110223	WO2011KR04574	20110622
WO2011KR04578	20110622	WO2011KR04573	20110622	WO2011KR04576	20110622
WO2011KR04640	20110624	WO2011KR04658	20110627	WO2011KR04657	20110627
WO2011KR04663	20110627	WO2011KR05234	20110715	WO2011US46583	20110804
WO2010KR08430	20101126	KR20100660902	20100626	WO2011KR04643	20110624
WO2011US48741	20110823	WO2011KR04652	20110627	WO2011US43685	20110712
WO2011KR04577	20110622	WO2010IB03388	20100917	WO2011KR04650	20110627
WO2011KR04664	20110627	US20130806730	20130410	US20160376339	20161212

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): AHN JUHNO ; AHN JUN HO ; AHN JUNGHO ; AHN JUNHO ; BAE YONGHWAN ; EUNGDAL KIM ; GILSUP JEONG ; CHOI HOSEON ; CHOI MUNHO ; CHOI JAEHYEOK ; CHEONG DALHO ; CHOI MOONSUK ; CHA

Inventor(s): (std):

JUYOUNG ; CHEON YEONGJOO ; CHEON KANGWOON ; JEONG WONCHUL ; HOONBONG LEE ; JEONG GILSUP ; HAN JONGHEE ; GO SEOGHO ; JANG BONGMUN ; HWANG SANGIL ; JUNG WONKYO ; HWANG HYEJIN ; JANG YONGWOON ; HAN JINWOOK ; JO KYUNGEUN ; JEONG SHINJAE ; HEO SUNGYONG ; JOO YOUNGHOON ; JUNG JIMOON ; JUNG HANSU ; JUNG JIMOOM ; GO SEONG ; JO KYUGEUN ; LEE KOONSEOK ; LG ELECTRONICS INC ; LEE HOONBONG ; KIM YANGHWAN ; KOONSEOK LEE ; JUNHO AHN ; KANG DAERYONG ; KIM YANG HWAN ; LEE HOON BONG ; LEE KOON SEOK ; LEE DAEGUI ; KIM MINCHEL ; KIM YONGHUN ; PARK CHANGAB ; OH YOUNGJIN ; LEE JOONGKEUN ; KIM DONGHYUN ; LEE WOONGHYUN ; LEE SUNGYONG ; KANG DAEHO ; LEE WOOKJIN ; KWAK HYUNJUNG ; KANG SANGSEOG ; LIM TAEYUN ; KWON JAEKUK ; KWON YOUNGTAE ; MIN BYEONGHO ; KANG SUNHEE ; KANG YOUNGHYUN ; KANG SEONGHWAN ; KWON YONGTAE ; KIM HOYOUNG ; LEE JEONGWON ; KIM EUNGDAL ; LEE SUNGYOUNG ; KIM YANGHOON ; KIM YAUNGHWAN ; LEE DEAGUI ; YOUN DONGHUN ; YANGHWAN KIM ; PARK DAEHWAN ; SEO JEONGSANG ; SEO EUNKYUNG ; PARK SEUNGJE ; SON YOUNGHO ; YEO SANGMIN ; SEO MOONSEOK ; SEO DAEGEUN ; PARK PYEONGWON ; PARK JINSEUNG ; SON JINHWAN ; PARK KYUNGYONG ; SON CHANGWOO ; SON KUYOUNG ; SEO SANGWOOK ; SHIN DONGCHUN ; SHIN KICHEOL ; PARK HYOUNGJUN ; SEO BOYOUNG ; PARK CHULKYU
CHEON YEONG JOO ; CHEON YEONGJOO ; CHEONG DAL HO ; CHEONG DALHO ; CHOI HO SEON ; CHOI HOSEON ; CHOI JAE HYEOK ; CHOI JAEHYEOK ; CHOI JONG MI ; CHOI MOON SUK ; CHOI MUN HO ; CHOI MUNHO ; EUNGDAL KIM ; GILSUP JEONG ; GO SEOG HO ; GO SEOGHO ; HAN JIN WOOK ; HAN JONG HYE ; HAN JONGHEE ; HEO SUNG YONG ; HEO SUNGYONG ; HOONBONG LEE ; HWANG HYE JIN ; HWANG SANG IL ; HWANG SANGIL ; JANG BONGMUN ; JANG YONG WOON ; JEON CHAN SUNG ; JEONG GIL SUP ; JEONG GILSUP ; JEONG SHIN JAE ; JEONG SHINJAE ; BAE YONG HWAN ; BAE YONGHWAN ; CHA JU YOUNG ; CHA JUYOUNG ; JEONG WON CHUL ; JEONG WONCHUL ; JO KYUNG EUN ; JO KYUNGEUN ; JOO YOUNGHOON ; JUNG HAN SU ; JUNG HANSU ; JUNG JIMOON ; JUNG WON KYO ; JUNG WONKYO ; JUNHO AHN ; KANG DAERYONG ; KANG SANGSEOG ; KANG SEONG HWAN ; KANG SEONGHWAN ; KANG SUNHEE ; AHN JUN HO ; AHN JUNHO ; KANG YOUNGHYUN ; KIM DONG HYUN ; KIM DONGHYUN ; KIM HO YOUNG ; KIM HOYOUNG ; KIM MIN CHEL ; KIM MINCHEL ; KIM MU SEUNG ; KIM YANG HWAN ; KIM YANGHOON ; KIM YANGHWAN ; KIM YONG HUN ; KIM YONGHUN ; KOONSEOK LEE ; KWAK HYUNJUNG ; KWON JAE KUK ; KWON JAEKUK ; KWON YONG TAE ; KWON YONGTAE ; KWON YOUN TAE ; KWON YOUNGTAE ; MUSEUNG KIM ; OH MIN JIN ; OH YOUNG JIN ; OH YOUNGJIN ; PARK CHAN GAB ; PARK CHANGAB ; PARK CHULKYU ; PARK DAEHWAN ; PARK HYOUNG JUN ; PARK HYOUNGJUN ; PARK JIN SEUNG ; PARK JINSEUNG ; PARK KYUNGYONG ; PARK PYEONG WON ; PARK PYEONGWON ; PARK SEUNG JE ; PARK SEUNGJE ; SEO BO YOUNG ; SEO BOYOUNG ; SEO DAEGEUN ; SEO EUN KYUNG ; SEO EUNKYUNG ; SEO JEONG SANG ; SEO JEONGSANG ; SEO MOONSEOK ; SEO SANGWOOK ; SEONGHWAN KANG ; SHIN DONG CHUN ; SHIN DONGCHUN ; LEE DAE GUI ; LEE HOON BONG ; LEE HOONBONG ; LEE JEONGWON ; LEE JOONG KEUN ; LEE JOONGKEUN ; LEE KOON SEOK ; LEE KOONSEOK ; LEE SUNG YONG ; LEE SUNGYONG ; LEE SUNGYOUNG ; LEE WOOKJIN ; LIM TAE YUN ; LIM TAEYUN ; MIN BYEONG HO ; MIN BYEONGHO ; SHIN KI CHEOL ; SHIN KICHEOL ; SON CHANG WOO ; SON CHANGWOO ; SON JIN HWAN ; SON JINHWAN ; SON KU YOUNG ; SON KUYOUNG ; SON YOUNG HYO ; SON YOUNGHO ; YANGHWAN KIM ; YEO SANG MIN ; YEO SANGMIN ; YOUN DONGHUN ; KIM EUNGDAL ; KI YANG HWAN ; KANG YOUNG HYUN ; KANG SUN HEE ; KANG SANG SEOK ; KANG DAEHO ; KANG DAE YONG ; JUNG JI MOON ; JOO YOUNG HOON ; JONGMI CHOI ; JO KYUGEUN ; JANG YONGWOON ; HYOUNGIUN PARK ; HWANG HYEJIN ; HAN JINWOOK ; GO SEONG ; DAEJONG KANG ; CHOI MOONSUK ; CHANSUNG JEON ; AN JUNHAO ; AHN JUHNO ; YOUN DONG HUN ; SEO MUN SEOK ; SEO DAE GEUN ; PARK CHUL KYU ; LEE WOONGHYUN ; LEE WOOK JIN ; KWAK HYUN JUNG ; KANG DAE HO ; JANG BONG MUN ; PARK KYUNG YONG ; LEE WOONG HYUN ; KIM EUNG DAL ; JUNG JIMOOM ; CHEON KANGWOON ; AHN JUNGHO ; PARK DAE HWAN ; LEE JEONG WON ; LEE DEAGUI ; LEE DAEGUI ; KANG DAE JONG ; CHEON KANG WOON ; KIM YAUNGHWAN

Inventor(s):

SHIN KICHEOL CHANGWON SIGYEONGSANGNAM DO ; MIN BYEONGHO CHANGWON SIGYEONGSANGNAM DO ; LIM TAEYUN CHANGWON SIGYEONGSANGNAM DO ; LEE KOONSEOK CHANGWON SIGYEONGSANGNAM DO ; LEE HOONBONG CHANGWON SIGYEONGSANGNAM DO ; SHIN DONGCHUN CHANGWON SIGYEONGSANGNAM DO ; KWON YOUNGTAE CHANGWON SIGYEONGSANGNAM DO ; KWON JAEKUK CHANGWON SIGYEONGSANGNAM DO ; KIM YANGHWAN CHANGWON SIGYEONGSANGNAM DO ; KANG YOUNGHYUN CHANGWON SIGYEONGSANGNAM DO ; AHN JUNHO CHANGWON SIGYEONGSANGNAM DO ; KANG SUNHEE CHANGWON SIGYEONGSANGNAM DO ; KANG SANGSEOG CHANGWON SIGYEONGSANGNAM DO ; JO KYUNGEUN CHANGWON SIGYEONGSANGNAM DO ; CHA JUYOUNG CHANGWON SIGYEONGSANGNAM DO ; JEONG SHINJAE CHANGWON SIGYEONGSANGNAM DO ; HEO SUNGYONG CHANGWON SIGYEONGSANGNAM DO

Agent(s):

DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; TER MEER STEINMEISTER AND PARTNER PATENTANWALTE MBB; VOSSIUS AND PARTNER PATENTANWALTE RECHTSANWALTE MBB; TER MEER STEINMEISTER AND PARTNER GBR; TER MEER STEINMEISTER AND PARTNER; URNER PETER; VOSSIUS AND PARTNER; DE ELZABURU ALBERTO; MCKENNA LONG AND ALDRIDGE LLP; KED AND ASSOCIATES LLP; DENTONS US LLP; HAW YONG NOKE; CHOI YONG S

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 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 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

Title: Method and **apparatus** for compressing gaseous fuel in a turbine engine

Abstract: Source: US2001017029A [EN] A gas turbine engine includes a rotatable impeller having a plurality of vanes with inlet and outlet ends. A plurality of diffuser channels are spaced apart radially beyond the outlet ends. A movable source of gaseous fuel is positioned adjacent the inlet ends of the vanes. The movable source of gaseous fuel is movable as a function of the rotational **speed** of the impeller, whereby the flow of gaseous fuel injected from the movable source is ejected from the outlet ends of the vanes into a selected one of the plurality of diffuser channels to facilitate combustion.

Classifications:

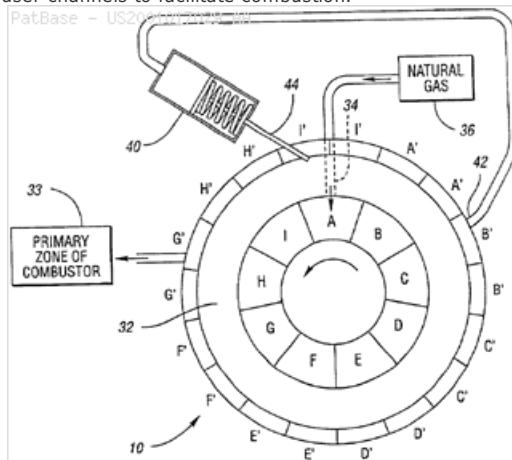
International (IPC 8-9): E21B47/00 F01D15/10 F02C3/22 F02C6/00 F02C7/00 F02C7/08 F02C7/236 F02C9/26 F02C9/32 F02C9/56 F04B47/02 H02J1/10 H02J1/14 H02J3/28 H02J3/32 H02J3/36 H02J3/38 H02J3/46 H02K7/18 H02P7/00 H02P9/00 H02P9/04 H02P9/08 (Advanced/Invention); E21B47/00 F01D15/00 F02C6/00 F02C7/00 F02C7/08 F02C9/00 F04B47/00 H02J1/10 H02J1/14 H02J3/28 H02J3/36 H02J3/38 H02K7/18 H02P7/00 H02P9/04 H02P9/08 (Core/Invention); F02N (Subclass/Invention)

International (IPC 1-7): E21B43/00 F01D15/10 F02C6/00 F02C7/00 F02C7/08 F02C7/22 F02C7/26 F02C9/26 F02C9/28 F02C9/30 F02C9/32 F02N F02N11/00 F04B49/00 F23R3/40 G06F19/00 H02H7/06 H02J1/10 H02J1/14 H02J3/28 H02J3/36 H02J3/46 H02K H02K7/18 H02K9/00 H02M5/45 H02P5/20 H02P9/00 H02P9/04 H02P9/08

CPC: F02C3/22 F02C7/2365 Y02E20/14 F05D2200/15 F05D2270/02 F05D2270/053 F05D2270/06 F05D2270/093 F05D2270/303 F05D2270/304 Y02E60/60 E21B47/0008 F04B47/022 F02C9/56 F01D15/10 F02C7/08 F02C9/26 F02C9/32 H02J3/38 H02J3/32 H02J3/36 Y10T74/18182 H02P2101/15 F05B2200/15 H02P9/04 H02J1/14 H02J1/10 Y10T307/305 H02J3/28 H02J3/381 H02J3/382 Y02E70/30

European: E21B47/00P2 F01D15/10 F02C3/22 F02C7/08 F02C7/236B F02C9/26 F02C9/32 F02C9/56 F04B47/02D H02J1/10 H02J1/14 H02J3/32 H02J3/36 H02J3/38 H02P9/04 R05B200/15 R05B270/101 R05B270/1033 R05B270/104 R05B270/1073 R05B270/303 R05B270/304 T02P9/00A3 Y02E20/14

US: 166/53 290/2 290/40 290/40A 290/40B 290/40C 290/40R 290/46 290/52 290/52P 290/54 290/7 307/18 318/140 318/145 318/147 318/375 318/723 318/801 322/10 322/17 322/17P 322/28 322/29 363/35 415/155 417/12 417/44.1 417/441 417/53 60/39.06 60/39.281 60/39.281S 60/39.465 60/390.6 60/723 60/723S 60/726 60/726S 60/734 60/734S 60/772 60/773 60/773P 60/776 60/776P 60/777 60/777P 60/778 60/778S 60/7730 700/287 700/287P 701/100 701/100P 74/41



Family:

Publication number	Publication date	Application number	Application date
AT311027 E	20051215	AT19980962993T	19981208
AU200220253 A1	20020603	AU20020020253	20011105
AU200220253 A5	20020603	AU20020020253	20011105
AU2002220253 AA	20020603	AU20020220253	20011105
CA2246769 AA	19990308	CA19982246769	19980908
CA2246769 C	20091110	CA19982246769	19980908
CA2279320 AA	20000427	CA19992279320	19990729
CA2326192 AA	20000927	CA19982326192	19981208
DE69832533 D1	20051229	DE19986032533	19981208
DE69832533 T2	20060330	DE19986032533T	19981208
DE69832860 D1	20060126	DE19986032860T	19980908
DE69832860 T2	20060824	DE19986032860T	19980908
EP0901218 A2	19990310	EP19980307247	19980908
EP0901218 A3	20000816	EP19980307247	19980908
EP0901218 B1	20051221	EP19980307247	19980908
EP1075724 A1	20010214	EP19980962993	19981208
EP1075724 B1	20051123	EP19980962993	19981208
EP1341990 A1	20030910	EP20010997623	20011105
EP1638184 A2	20060322	EP20050025283	19981208
EP1638184 A3	20090325	EP20050025283	19981208
IL125905 A0	19990411	IL19980125905	19980824
IL125905 A1	20001206	IL19980125905	19980824
IL137542 A0	20010724	IL20000137542	20000726
IL137542 A1	20030731	IL20000137542	20000726
JP11122995 A2	19990430	JP19980220231	19980804
JP2002510957 T2	20020409	JP20000542839T	19981208
US2001017029 AA	20010830	US20010772537	20010129
US2001052704 AA	20011220	US20010834579	20010412
US2002030364 AA	20020314	US20010829035	20010409
US2002073713 AA	20020620	US20010953022	20010913
US2002099476 AA	20020725	US20010977883	20011011
US2002121091 AA	20020905	US20010012770	20011105
US2002166324 AA	20021114	US20010933663	20010822
US2002190695 AA	20021219	US20020077121	20020215
US2002198648 AA	20021226	US20020037916	20020102
US2003007369 AA	20030109	US20020224406	20020821
US2004100101 AA	20040527	US20030706070	20031113
US2004103669 AA	20040603	US20030706008	20031113
US2004119291 AA	20040624	US20030726586	20031204
US2004135436 AA	20040715	US20030677480	20031003
US2004245783 AA	20041209	US20040887297	20040709
US5903116 A	19990511	US19970924966	19970908

US6031294 A	20000229	US19980003078	19980105
US6192668 BA	20010227	US19990420494	19991019
US6265786 BA	20010724	US19980181213	19981027
US6325142 BA	20011204	US19990316896	19990522
US6381944 BB	20020507	US20010772537	20010129
US6487096 BA	20021126	US19980207817	19981208
US6495929 BB	20021217	US20010829035	20010409
US6612112 BB	20030902	US20010012770	20011105
US6784565 BB	20040831	US20020077121	20020215
US6870279 BB	20050322	US20020037916	20020102
US6958550 BB	20051025	US20040887297	20040709
US6960840 BB	20051101	US20030706070	20031113
USRE40713 E	20090519	US20010853852	20010511
WO0242611 A1	20020530	WO2001US47201	20011105
WO9952193 A1	19991014	WO1998US26139	19981208

Priority:

CA19982246769	19980908	CA19992279320	19990729	EP19980962993	19981208
IL19980125905	19980824	IL20000137542	20000726	US19980181213	19981027
US19980003078	19980105	US19970924966	19970908	US19980080457P	19980402
US20010834579	20010412	US20010829035	20010409	US20010853852	20010511
US19990316896	19990522	US20010772537	20010129	US19990420494	19991019
US19980207817	19981208	US20010269546P	20010216	US20010276354P	20010316
US20010012770	20011105	US20000245829P	20001103	US20010277490P	20010321
US20020224406	20020821	WO2001US47201	20011105	US20030726586	20031204
US20020303051	20021125	US20030677480	20031003	US20040887297	20040709
US20030706008	20031113	US20030706070	20031113	US20020037916	20020102
US20020077121	20020215	US20010977883	20011011	US20010933663	20010822
US20010953022	20010913	WO1998US26139	19981208		

Probable Assignee: CAPSTONE TURBINE CORP

Assignee(s): (std): GILBRETH MARK G ; WACKNOV JOEL ; WALL SIMON ; WACKNOV JOEL B ; WALL SIMON R ; CAPSTONE TURBINE CORP

Assignee(s): CAPSTONE TURBINE CORP TARZANA ; DICKY BRIAN ; EDELMAN ED ; EDELMAN EDWARD C ; GEIS EVERETT R ; GILBRETH MARK ; BOSLEY ROBERT W ; WELLS FARGO BANK NATIONAL ASSOCIATION ; HAMRIN DOUGLAS A ; KANG YUNGMO ; JENSEN HARRY L ; PONT GUILLERMO ; PETICOLAS BRIAN W ; LAMPE STEVEN W ; WESTERN ALLIANCE BANK AN ARIZONA CORP

Inventor(s): (std): BOSLEY ROBERT W ; EDELMAN ED ; EDELMAN EDWARD C ; GEIS EVERETT R ; LAMPE STEVEN W ; PETICOLAS BRIAN W ; WILLIS JEFFREY W ; WALL SIMON ; WACKNOV JOEL ; PONT GUILLERMO ; KANG YUNGMO ; JENSEN HARRY L ; HAMRIN DOUGLAS A ; GILBRETH MARK ; DICKY BRIAN ; BERNER PAUL ; WALL SIMON R ; WACKNOV JOEL B ; MACKAY ROBIN ; GILBRETH MARK G

Inventor(s): ED EDELMAN ; JOEL WACKNOV ; SIMON WALL ; MARK GILBRETH

Agent(s): PIASETZKI AND NENNIGER LLP; SMART AND BIGGAR; LAMB RICHARD ANDREW ET AL; REINHOLD COHN AND PARTNERS; STERNE KESSLER GOLDSTEIN AND FOX PLLC; LUCIAN WAYNE; WADDEY AND PATTERSON; WADDEY AND PATTERSON PC; BEAVERS LUCIAN WAYNE

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 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 SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: **ELECTRIC POWER GENERATION SYSTEM** CONTROLLED TO REDUCE PERCEPTION OF OPERATIONAL CHANGES

Abstract: Source: US2008116695A [EN] An electric power **system** includes an engine, a generator driven by the engine, an electrical energy storage **device**, power control circuitry coupling the generator and storage **device** together, and a processor coupled to the circuitry. The generator provides variable AC power and the storage **device** provides variable DC power to the circuitry. The processor executes operating logic to provide control signals to the circuitry to operate the generator at a first **speed** to provide a first level of AC electricity, increase the DC power provided from the storage **device** to increase the AC electricity to a second level, increase operating **speed** of the generator from the first **speed** to a second **speed** greater than the first **speed**, decrease the DC power from the storage **device** as the operating **speed** of the generator increases, and limit acceleration of the operating **speed** to reduce perception of a **speed** change.

Classifications:

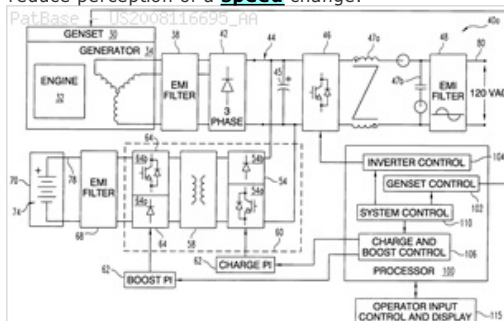
International (IPC 8-9): B60K6/02 B60L1/00 B60L11/12 B60L15/00 B60L15/20 B60L3/00 F02D29/06 F02D31/00 G05F1/70 H01H11/00 H02G3/00 H02H3/20 H02H7/06 H02J1/10 H02J11/12 H02J11/14 H02J3/00 H02J3/02 H02J3/06 H02J3/32 H02J3/34 H02J3/38 H02J4/00 H02J7/00 H02J7/04 H02J7/14 H02J7/34 H02J9/00 H02K7/18 H02M5/45 H02M7/00 H02P11/00 H02P27/04 H02P9/00 H02P9/04 (Advanced/Invention); H02M5/458 (Advanced/Non-invention); B60L1/00 F02D29/06 H02H3/20 H02J1/10 H02J11/14 H02J3/00 H02J3/02 H02J3/04 H02J3/28 H02J3/38 H02J7/04 H02J7/14 H02J7/34 H02M7/00 H02P11/00 H02P27/04 H02P9/00 H02P9/04 (Core/Invention)

CPC: H01H11/00 H02J9/00 H02J3/005 H02J7/1423 B60L11/1816

Y02T90/14 B60L2200/32 B60K6/26 B60K6/46 H02J7/34 H02M5/458 B60L15/007 Y02T10/7275 B60L11/123 B60L15/2045 B60L2210/20 F02D29/06 F02D31/001 F02D41/083 Y02T10/6217 Y02T10/7077 Y02T10/725 Y02T10/7283 B60L15/20 H02J7/1438 H02J7/1446 Y02T10/92 B60L11/1881 B60L11/1892 H02P9/04 H02P9/48 H02P2101/45 Y02T90/34 B60L11/1851 H02J7/022 H02P2201/09 Y02T10/7005 Y02T10/705 B60L11/1864 B60L2200/18 B60L2200/36 B60L2210/14 B60L2210/30 B60L2210/40 B60L2240/421 B60L2240/423 B60L2240/441 B60L2240/443 B60L2270/14 Y10T307/336 Y10T307/367 Y10T307/675 Y10T307/707 Y10T307/718 Y10T307/313 Y10T307/352 Y10T307/383 Y10T307/516 Y10T307/522 H02J7/14 H02J4/00 H02J7/1415 Y10T29/49105 Y10T307/344 Y10T307/696 Y02T10/645 Y02T10/7061 Y02T10/7072 Y02T10/7225 Y02T10/7241 Y02T90/127 Y02T10/642 H02P9/10 B60L1/00 B60L11/1842 B60W10/06 B60W10/08 B60W10/26 B60W10/30 B60W20/13 B60L2270/145 Y02E60/721 Y02T90/121 Y02T90/128 Y02T90/163 Y02T90/169 Y04S10/126 Y04S30/14 Y02T10/6286

European: B60L1/00 B60L11/12D B60L11/18L4 B60L11/18M B60L11/18R B60L11/18R8D B60L15/20 B60L15/20E F02D29/06 F02D31/00B H02J3/00M H02J7/02B H02J7/14D H02J7/14E H02J7/14F H02P9/04 H02P9/10 H02P9/30D2 H02P9/48 L60L210/20 R02D41/08B T02P201/09 T02P9/00A1 Y02T10/62F2 Y02T10/64B Y02T10/64D Y02T10/64D4 Y02T10/70 Y02T10/70B Y02T10/70H4 Y02T10/70J2 Y02T10/70J4 Y02T10/72B4 Y02T10/72B6 Y02T10/72D6 Y02T10/92 Y02T90/12B Y02T90/12J Y02T90/14 Y02T90/34

US: 1/1 180/65.2 29/622 290/1.00A 290/1.00RS 290/1A 290/1R 290/40.00A 290/40.00BP 290/40.00C 290/40.00CP 290/40.00D 290/40.00F 290/40.00R 290/40A 290/40B 290/40C 290/40D 290/40F 290/40R 290/41 290/44 290/50 290/50S 290/52 307/10.1 307/10.100P 307/10.100S 307/19 307/19S 307/22 307/22S 307/23 307/23P 307/24 307/24S 307/26 307/26S 307/28 307/28S 307/46 307/47 307/75 307/75S 307/80 307/80S 307/82 307/82S 307/84 307/84S 307/9.1 307/9.100P 320/134 320/134S 320/135 320/135S 322/14 322/25 322/25S 322/32 322/32S 322/44 322/7 322/7P 323/207



Family:

Publication number	Publication date	Application number	Application date
CN101636900 A	20100127	CN200780049892	20071116
CN101636900 B	20130306	CN200780049892	20071116
CN101636901 A	20100127	CN200780049922	20071116
CN101636901 B	20130717	CN200780049922	20071116
CN101647170 A	20100210	CN200780049893	20071116
CN101647170 B	20131113	CN200780049893	20071116
CN102350955 A	20120215	CN201110312329	20071116
CN102350955 B	20140409	CN201110312329	20071116
CN102991364 A	20130327	CN201210168406	20071116
CN102991364 B	20150211	CN201210168406	20071116
CN103560576 A	20140205	CN201310467198	20071116
CN103560576 B	20160511	CN201310467198	20071116
US2008116695 AA	20080522	US20060600937	20061116
US2008157540 AA	20080703	US20070809745	20070601
US2008157591 AA	20080703	US20070788942	20070423
US2008157592 AA	20080703	US20070809421	20070601
US2008157593 AA	20080703	US20070809751	20070601
US2008157594 AA	20080703	US20070809768	20070601
US2008157724 AA	20080703	US20070789913	20070426
US2009302616 AA	20091210	US20090462891	20090811
US2011215641 AA	20110908	US20110019292	20110201
US2011227408 AA	20110922	US20110930346	20110104
US2012193982 AA	20120802	US20110337756	20111227
US2013214596 A9	20130822	US20110019292	20110201
US2013257148 AA	20131003	US20130900813	20130523
US2013328389 AA	20131212	US20130967021	20130814
US7554214 BB	20090630	US20070789913	20070426
US7573145 BB	20090811	US20060600937	20061116
US7598623 BB	20091006	US20070788942	20070423
US7687929 BB	20100330	US20070809745	20070601
US7855466 BB	20101221	US20070809421	20070601
US7880331 BB	20110201	US20070809751	20070601
US7956584 BB	20110607	US20070809768	20070601
US7999405 BB	20110816	US20090462891	20090811
US8513925 BB	20130820	US20110337756	20111227
US8525492 BB	20130903	US20110930346	20110104
US8729869 BB	20140520	US20130967021	20130814

US8810062 BB	20140819	US20130900813	20130523
US9118206 BB	20150825	US20110019292	20110201
WO08063575 A2	20080529	WO2007US24105	20071116
WO08063575 A3	20080717	WO2007US24105	20071116
WO08063580 A2	20080529	WO2007US24114	20071116
WO08063580 A3	20081009	WO2007US24114	20071116
WO08063612 A2	20080529	WO2007US24194	20071116
WO08063612 A3	20080821	WO2007US24194	20071116

Priority:

CN200780049892	20071116	CN200780049893	20071116	US20060600927	20061116
US20060600937	20061116	US20060877970P	20061229	US20060877966P	20061229
US20060877751P	20061229	US20060877746P	20061229	US20060877969P	20061229
US20070788942	20070423	US20070789913	20070426	US20070809751	20070601
US20070809421	20070601	US20070809768	20070601	US20070809745	20070601
US20090462891	20090811	US20070005674	20071228	US20070006075	20071228
US20070809607	20070601	US20110019292	20110201	US20060877971P	20061229
US20110930346	20110104	US20110337756	20111227	WO2007US24114	20071116
WO2007US24194	20071116	WO2007US24105	20071116	US20130967021	20130814
US20130900813	20130523				

Probable Assignee: CUMMINS POWER GENERATION IP INC

Assignee(s): (std): CUMMINS POWER GENERATION IP ; CUMMINS POWER GENERATION IP IN ; PETERSON MITCHELL E ; FATTAL SOUREN G ; NADEN MARK ; KUNIN SERGEY ; CUMMINS POWER GENERATION IP INC ; MARLENEE ALYSSA ; AYANA ELIAS ; BAX RANDALL ; BAX RANDALL L

Assignee(s): COUMMINS POWER GENERATION IP INC ; CUMMINS POWER GENERATION IP IN US

Inventor(s): (std): BAX RANDALL ; BAX RANDALL L ; FATTAL SOUREN G ; KUNIN SERGEY ; MARK NADEN ; NADEN MARK ; PETERSON MITCHELL E ; SERGEY KUNIN ; MARLENEE ALYSSA ; CARNEY ALLEN B ; AYANA ELIAS ; S G FATTAL ; PETERSON M E ; M E PETERSON ; FATTAL S G ; PAUTZKE ROGER ; MURRAY JERRY ; MCCARTHY JOHN ; CAMEY ALLEN B

Agent(s): KRIEG DEVAULT LLP; KREIG DEVAULT LLP; J BRUCE; L SCOTT; FOLEY AND LARDNER LLP; PAYNTER LELAND SCOTT ET AL; COLLIER DOUGLAS A ET AL

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

Abstract: Source: US2003228252A [EN] An **apparatus, system,** and method generate hydrogen through a controlled chemical reaction between water and a chemical hydride. The invention includes a chemical hydride isolated from water by a water-selective membrane. A fluid containing water is brought into contact with the water-selective membrane. The water diffuses through the water-selective membrane and reacts with the chemical hydride. The water diffuses through the membrane at a predetermined rate based on a water concentration gradient across the water-selective membrane. The water-selective membrane is substantially impermeable to elements and molecules other than water. Hydrogen generated within the chemical hydride is collected and used in various applications.

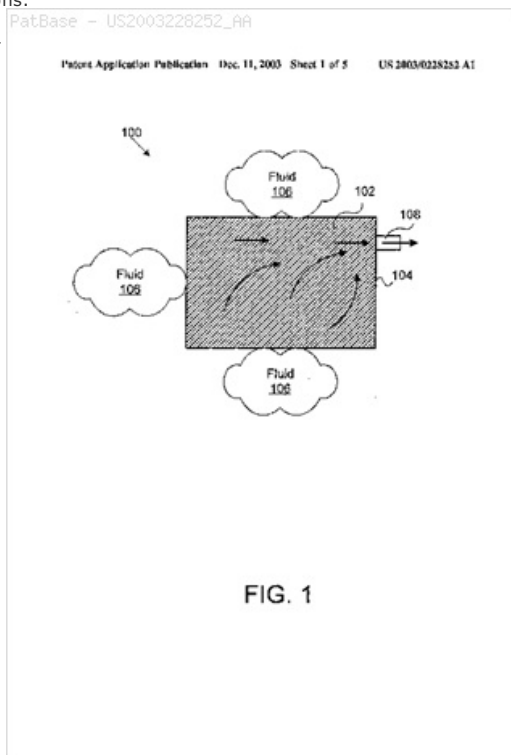
International (IPC 8-9): B01D46/00 B01J16/00 B01J19/00 B01J19/24
B01J7/00 B01J7/02 B01J8/00 B01J8/02 B65D81/00 C01B3/00
C01B3/02 C01B3/06 C01B3/08 C01B3/26 C01B3/50 C01C1/00
C10J3/00 C10J3/20 F02C6/00 F17C13/00 F17C13/08 F25J1/00
G05D16/00 G05D7/00 H01M2/00 H01M2/02 H01M2/10 H01M2/14
H01M8/00 H01M8/04 H01M8/06 H01M8/12 H01M8/18 H02J13/00
H02J3/00 H02J3/32 H02J3/38 H02J3/46 (Advanced/Invention);
C01B3/06 C10J3/00 H01M8/00 H01M8/06 (Advanced/Non-invention);
B01D46/00 B01J16/00 B01J19/00 B01J19/24 B01J7/00 B01J8/02
C01B3/00 C01C1/00 C10J3/00 C10J3/02 F25J1/00 G05D16/00
G05D7/00 H01M2/02 H01M2/10 H01M2/14 H01M8/00 H01M8/04
H01M8/06 H01M8/12 H01M8/18 H02J3/00 H02J3/28 H02J3/38
H02J3/46 (Core/Invention);
C10J3/00 H01M8/06 (Core/Non-invention)

International (IPC 1-7): C01B35/00 C02F 01/00 H01M 1/02 1/14 H01M 8/00
CPC: B01119/2475 B01119/2485 B011229/001164 B0112208/001006
B0112208/000371 B0112208/000752 B0112208/000761 B0112208/000814
H01M8/04007 H01M8/04373 H01M8/04567 H01M8/04597
H01M8/04664 H01M8/04738 H01M8/04753 H01M8/04761
H01M8/04955 C01B35/02 C01B35/56 C01B2203/0415 C01B2203/0465
C01B2203/048 C01B2203/0485 C01B2203/0495 H01M8/04947
H01M8/04619 H01M8/04626 H01M8/0494 H01M8/0618 H01M8/0656
H01M16/006 H01M2008/1095 H01M2008/1293 H01M2250/402
H02J1/102 H02J7/34 Y02B90/12 B0112208/000117 B0112208/000539
B0112219/002 B0112219/00213 B0112219/00231 H01M8/0662
H01M8/0687 H02J3/381 H02J3/383 H02J3/386 H02J3/387
Y02E10/563 Y02E10/763 H02J3/382 Y02E60/324 Y10T307/516
H01M8/04149 H01M8/04156 B01J8/0271 C01B2203/066
H01M8/04119 H01M8/04201 H01M8/04089 H01M8/04231
H01M8/04126 H01M16/003 H01M8/04365 H01M8/04388
H01M8/04731 H01M8/04776 C01B3/065 B01J7/02 F17C11/005
H01M8/04208 H01M8/04216 H01M8/065 Y02E60/321 Y02E60/362
H01M8/241 H01M8/2465 H01M8/2485

H01M8/241 H01M8/2465 H01M8/2465
European: B01J19/24P B01J19/24R2 B01J7/02 B01J8/02D6
C01B3/06C C01B3/52 C01B3/56 F17C11/00D H01M16/00F2
H01M8/04B H01M8/04C2 H01M8/04C2E1C H01M8/04C6
H01M8/04C6B H01M8/04C6D H01M8/04H4B12 H01M8/04H4B14 H01M8/04H4D2 H01M8/04H4K2F H01M8/04H4K4F
H01M8/04H4K6D H01M8/04H4K6F H01M8/04H6B10 H01M8/04H6B8 H01M8/04H6D2 H01M8/04H6D4 H01M8/04H6D8
H01M8/04H6K6D H01M8/04H6K6F H01M8/06B4 H01M8/24D4 H02J1/10C H02J7/34 L01J208/00C2 L01J208/00C2D
L01J208/00C2H2D4 L01J208/00C4 L01J208/00F2 L01J208/00F4 L01J208/00L2F L01J219/00B20B2D L01J219/00B20F2
L01J219/00B20H4B L01J219/00B6 M01B203/04D M01B203/04P M01B203/04P12 M01B203/04P6 M01B203/04P8
M01B203/06H T01M16/00F T01M250/40B T01M8/04B T01M8/04C2E T01M8/04C2E1 T01M8/04C2E2 T01M8/04C8B
T01M8/04H4M T01M8/04H6K6H T01M8/06B2A T01M8/06B4 T01M8/06B6 T01M8/10P T01M8/12Y T01M8/24D T02J3/38D1
Y02B90/12 Y02E60/32B Y02E66/36 Y02E60/36B Y02E60/50

US: 252/188.25 252/188.250S 307/46 307/46S 320/101 420/900 420/900S 422/111 422/111P 422/112 422/112P 422/119 422/119P 422/148 422/148P 422/162 422/162S 422/189 422/189S 422/198 422/198S 422/211 422/222 422/222S 422/232 422/232S 422/234 422/236 422/236S 422/238 422/238S 422/239 422/239P 422/239S 422/240 422/240S 422/600 422/600S 422/625 422/626 422/630 423/657 423/657P 429/17 429/19 429/23 429/25 429/34 429/39 429/410 429/410P 429/410S 429/413 429/413S 429/414 429/414P 429/416 429/416P 429/421 429/421S 429/442 429/442S 429/443 429/443S 429/444 429/444S 429/450 429/450S 429/454 429/454S 429/458 429/458S 429/502 429/506 429/506S 429/511 429/511S 429/515 429/515S 429/900 429/900S 48/120 48/174 48/199FM 48/204 48/61 48/61P 48/61S 700/11 700/22 700/286 700/291 700/291P 700/297

Publication number	Publication date	Application number	Application date
AU2005304304 AA	20060518	AU20050304304	20051112
AU2005304304 BB	20090115	AU20050304304	20051112
AU2008279076 AA	20090129	AU20080279076	20080725
AU2008279079 AA	20090129	AU20080279079	20080725
AU2008279082 AA	20090129	AU20080279082	20080725
BRPI0516690 A	20080916	BR2005PI16690	20051112
CA2587563 AA	20060518	CA20052587563	20051112
CA2587563 C	20100817	CA20052587563	20051112
CA2731802 AA	20090129	CA20082731802	20080725
CA2731803 AA	20090129	CA20082731803	20080725
CA2732060 AA	20090129	CA20082732060	20080725
CN101855749 A	20101006	CN200880108669	20080725
CN101855758 A	20101006	CN200880108664	20080725
CN101855769 A	20101006	CN200880108666	20080725
DE602005035243 D1	20120913	DE200560035243T	20051112
DK1814653 T3	20121015	DK20050848152T	20051112
EP1814653 A1	20070808	EP20050848152	20051112
EP1814653 A4	20081105	EP20050848152	20051112
EP1814653 B1	20120718	EP20050848152	20051112
EP2181473 A1	20100505	EP20080796626	20080725
EP2181473 A4	20140219	EP20080796626	20080725
EP2181477 A1	20100505	EP20080782389	20080725
EP2181477 A4	20110803	EP20080782389	20080725



EP2183802 A1	20100512	EP20080796620	20080725
EP2183802 A4	20110727	EP20080796620	20080725
ES2391283 T3	20121123	ES20050848152T	20051112
HK1110822 A3	20080725	HK20080101439	20080206
IN01318DN2010 A	20100813	IN2010DN01318	20100224
IN01319DN2010 A	20100813	IN2010DN01319	20100224
IN01320DN2010 A	20100813	IN2010DN01320	20100224
JP2008532893 T2	20080821	JP20070541365T	20051112
KR20100057624 A	20100531	KR20107004237	20080725
KR20100058510 A	20100603	KR20107004234	20080725
KR20100061453 A	20100607	KR20107004241	20080725
US2003228252 AA	20031211	US20030459991	20030611
US2006059778 AA	20060323	US20050270947	20051112
US2007189940 AA	20070816	US20070740349	20070426
US2008020260 AA	20080124	US20070828265	20070725
US2008025880 AA	20080131	US20070829019	20070726
US2008026269 AA	20080131	US20070829035	20070726
US2009025293 AA	20090129	US20080179578	20080724
US2009029227 AA	20090129	US20080179554	20080724
US2009053134 AA	20090226	US20080198613	20080826
US2009076661 AA	20090319	US20080179882	20080725
US2009304554 AA	20091210	US20090477564	20090603
US2009304558 AA	20091210	US20090480099	20090608
US2010129266 AA	20100527	US20090645223	20091222
US2011027670 AA	20110203	US20090641217	20091217
US7393369 BB	20080701	US20030459991	20030611
US7438732 BB	20081021	US20050270947	20051112
US7556660 BB	20090707	US20070740349	20070426
US7648786 BB	20100119	US20070829035	20070726
US7651542 BB	20100126	US20070829019	20070726
US8152873 BB	20120410	US20090645223	20091222
US8357213 BB	20130122	US20090477564	20090603
US8357214 BB	20130122	US20090480099	20090608
US8364287 BB	20130129	US20080179882	20080725
WO06053236 A1	20060518	WO2005US40975	20051112
WO06053236 C1	20070125	WO2005US40975	20051112
WO08014460 A2	20080131	WO2007US74607	20070727
WO08014460 A3	20081204	WO2007US74607	20070727
WO08014460 A4	20090122	WO2007US74607	20070727
WO08014467 A2	20080131	WO2007US74614	20070727
WO08014467 A3	20081016	WO2007US74614	20070727
WO09015325 A1	20090129	WO2008US71154	20080725
WO09015328 A1	20090129	WO2008US71162	20080725
WO09015331 A1	20090129	WO2008US71181	20080725
WO09149459 A1	20091210	WO2009US46638	20090608

Priority:

EP20050848152	20051112	US20020387817P	20020611	US20030459991	20030611
US20050270947	20051112	US20040627257P	20041112	US20040632460P	20041202
US20070828265	20070725	US20070829019	20070726	US20070829035	20070726
US20070740349	20070426	US20060820574P	20060727	US20050655373P	20050223
US20050683024P	20050520	US20050688456P	20050608	US20070951925P	20070725
US20070951907P	20070725	US20070951903P	20070725	US20080179578	20080724
US20080179554	20080724	US20080198613	20080826	US20080179882	20080725
US20090477564	20090603	US20080059743P	20080606	US20090480099	20090608
WO2008US71154	20080725	WO2008US71181	20080725	WO2008US71162	20080725
US20090645223	20091222	US20090641217	20091217	WO2005US40975	20051112

Probable Assignee: TRULITE INC

Assignee(s): (std): ANDERSON HOWARD ; BRYDON CHRIS ; BRYDON CHRIS A ; LADD ERIC ; LADD ERIC J ; SHURTLEFF JAMES KEVIN ; TRULITE INC ; PATTON JOHN M ; SHURTLEFF JAMES K ; PATTON JOHN ; SHURTLEFF KEVIN ; PEARSON KEN ; PATTON JOHN MADISON ; THULITE INC ; SHURTLEFF J KEVIN ; WANG GUANGDE ; YOU EUGENE

Assignee(s): TRULITE TECHNOLOGY LLC ; ALONSO MOLLY ; MCCLAREN ADVANCE LP ; TRULITE INC HOUSTON

Inventor(s): (std): YOU EUGENE ; WANG GUANGDE ; SHURTLEFF KEVIN ; SHURTLEFF JAMES KEVIN ; SHURTLEFF JAMES K ; SHURTLEFF J KEVIN ; PEARSON KEN ; PATTON JOHN M ; PATTON JOHN ; LADD ERIC J ; LADD ERIC ; KEN PEARSON ; GUANGDE WANG ; EUGENE YOU ; BRYDON CHRIS A ; BRYDON CHRIS ; ANDERSON J H ; ANDERSON HOWARD ; ANDERSON J HOWARD ; CHRIS BRYDON ; JOHN PATTON ; PATTON JOHN MADISON

Inventor(s): JOHN M PATTON ; JAMES KEVIN SHURTLEFF ; HOWARD ANDERSON ; ERIC J LADD ; CHRIS A BRYDON ; LADD ERIC J WEST JORDAN ; PATTON JOHN M WEST JORDAN ; SHURTLEFF JAMES ; SHURTLEFF JAMES KEVIN OREM ; BRYDON CHRIS A SALT LAKE CITY ; ANDERSON HOWARD CEDAR FORT ; ANDERSON J

Agent(s): FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; PEGASUS IP; GRIFFITH HACK; OSLER HOSKIN AND HARCOURT LLP; V BEZOLD AND PARTNER PATENTANWAELTE PARTG MBB; BASSIL NICHOLAS CHARLES; PAWLYN ANTHONY NEIL; UNGRIA JAVIER; JONES WALKER WAECHTER POITEVENT CARRERE AND DENEGRE LLP; KUNZLER AND MCKENZIE; KUNZLER NEEDHAM MASSEY AND THORPE; KUNZLER LAW GROUP PC; MCKENZIE DAVID J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC 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 PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: LINEAR FARADAY INDUCTION GENERATOR FOR THE GENERATION OF ELECTRICAL POWER FROM OCEAN WAVE KINETIC ENERGY AND ARRANGEMENTS THEREOF

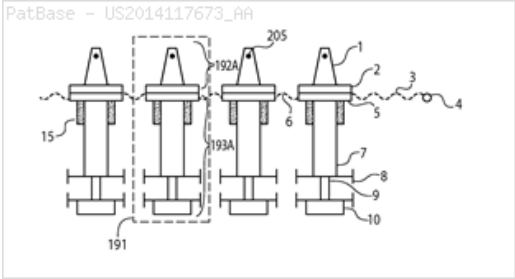
Abstract: Source: US2014117673A [EN] Various embodiments of linear electric generators and arrangements thereof are disclosed. One such generator includes a permanent magnetic array with magnets that are oriented such that like poles of the magnets are disposed adjacently to concentrate a magnetic field through a coil array. To enhance the magnetic field distribution, the magnets are affixed under a compressive strain due to repulsive forces resulting from proximity of the like poles. According to another aspect, a plurality of vibrational linear electric generators (VLEGs) can be arranged so that magnets of different VLEGs are oriented so that poles of opposite polarity are disposed adjacently to further enhance magnetic field concentration through coil arrays. In addition, a plurality of wave energy converters can be arranged in very close proximity, at most 8 times a height of a buoyant portion of the converters, to act as a seawall and thereby protect various structures from ocean waves.

Classifications:

International (IPC 8-9): C23F13/00 C25B1/10 C25B15/08 C25B9/04 C25B9/08 F03B13/10 F03B13/12 F03B13/16 F03B13/18 F03B13/20 F21S9/04 F21V23/04 H01F7/02 H02K35/00 H02K35/02 H02K7/18 H02M7/06 H02P9/04 (Advanced/Invention)

CPC: F03B13/20 H02K35/00 H02K7/1876 H02K2203/00 F03B13/16 F03B13/1855 F03B13/188 F05B2220/707 F05B2240/40 H01F7/0273 H02K35/02 H02M7/064 H02M7/066 Y02E10/38 C25B9/04 H02K7/1853 C25B1/10 C25B9/08 C25B15/08 C23F13/005 Y02E60/366

US: 1/1 248/610 290/42 290/50 290/53 310/30 335/306



Family:

Publication number	Publication date	Application number	Application date
US2014117673 AA	20140501	US20130141698	20131227
US2014117674 AA	20140501	US20130141723	20131227
US2014313001 AA	20141023	US20140322612	20140702
US2014339928 AA	20141120	US20140447723	20140731
US2015145258 AA	20150528	US20150611713	20150202
US2016010619 AA	20160114	US20150861344	20150922
US2016252071 AA	20160901	US20160154541	20160513
US2017198401 AA	20170713	US20170465992	20170322
US8629572 BA	20140114	US20120662630	20121029
US8946919 BB	20150203	US20130141698	20131227
US8946920 BB	20150203	US20130141723	20131227
US8952560 BB	20150210	US20140447723	20140731
US8963358 BB	20150224	US20140322612	20140702
US9476400 BB	20161025	US20150611713	20150202
US9624900 BB	20170418	US20160154541	20160513
US9644601 BB	20170509	US20150861344	20150922
WO14070720 A1	20140508	WO2013US67235	20131029

Priority:

US20120662630 20121029	US20130141698 20131227	US20130141723 20131227
US20140322612 20140702	US20140447723 20140731	US20150611713 20150202
US20150861344 20150922	US20160154541 20160513	US20170465992 20170322

Probable Assignee: ENERGYSTICS LTD

Assignee(s): (std): ENERGYSTICS LTD ; GABBAY ELIANNE M ; PHILLIPS REED E

Inventor(s): (std): GABBAY ELIANNE M ; PHILLIPS REED E

Agent(s): TUTUNJIAN AND BITETTO PC; TUTUNJIAN JOHN G

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 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 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

Title: SMART ISLANDING AND POWER BACKUP IN A POWER AGGREGATION **SYSTEM** FOR DISTRIBUTED ELECTRIC RESOURCES

Abstract: Source: US2008039979A [EN] **Systems** and methods are described for a power aggregation **system**. In one implementation, a service establishes individual Internet connections to numerous electric resources intermittently connected to the power grid, such as electric vehicles. The Internet connection may be made over the same wire that connects the resource to the power grid. The service optimizes power flows to suit the needs of each resource and each resource owner, while aggregating flows across numerous resources to suit the needs of the power grid. The service can bring vast numbers of electric vehicle batteries online as a new, dynamically aggregated power resource for the power grid. Electric vehicle owners can participate in an electricity trading economy regardless of where they plug into the power grid.

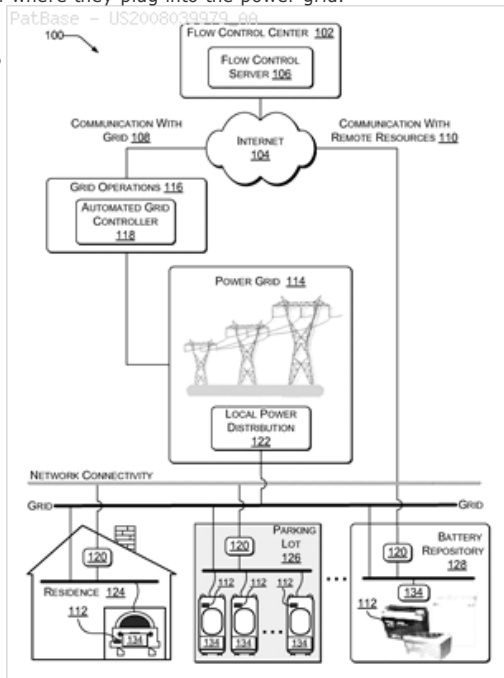
Classifications:

International (IPC 8-9): B60L B60L11/00 B60L11/18 B60L5/00 B60W20/00 E01H4/00 G01R11/00 G01R11/56 G01R21/00 G01R21/06 G01S19/42 G01S3/02 G05B11/01 G05B13/02 G05B15/02 G05D17/00 G05D29/00 G05D3/00 G06F1/26 G06F1/32 G06F15/16 G06F15/173 G06F17/00 G06F19/00 G06F7/00 G06F9/00 G06Q G06Q10/00 G06Q20/00 G06Q30/00 G06Q30/02 G06Q40/00 G06Q50/00 G06Q50/06 G06Q99/00 H01M8/04 H02J H02J1/14 H02J13/00 H02J3/00 H02J3/32 H02J3/38 H02J5/00 H02J7/00 H02J7/02 H02J7/04 H02J7/32 H02J7/34 H04L12/28 H04L9/00 H04Q9/00 H04W48/16 (Advanced/Invention); B60Q1/26 G01S3/02 G05D3/00 G06F15/02 G06Q40/00 H01R29/00 H02J3/32 (Advanced/Non-invention); B60L11/00 B60L11/18 B60L5/00 E01H4/00 G01R11/00 G01R21/00 G05B11/01 G05D29/00 G06F15/16 G06F19/00 G06Q10/00 G06Q50/00 G06Q99/00 H01M8/04 H02J1/14 H02J13/00 H02J3/28 H02J7/00 H02J7/32 H04L12/28 H04Q9/00 (Core/Invention); G01S3/02 G06F15/02 H01R29/00 (Core/Non-invention); B60L H02J (Subclass/Invention)

CPC: B60L11/1848 B60L3/12 B60L11/1816 B60L11/184 B60L11/1842 B60L11/1846 B60L2230/34 B60L2240/70 B60L2270/32 H02J13/0079 H02J13/0086 H04L12/4625 H04L67/12 H04L67/125 Y02B90/2669 Y02E40/76 Y02T10/7088 Y02T10/7291 Y04S10/545 Y04S40/128 H04W48/16 H02J13/0006 B60L11/1811 B60L11/1824 B60L2270/34 B60L11/1838 B60L11/1809 G06Q50/00 G01D4/004 G01R21/133 Y02B90/242 Y04S20/322 B60L2230/16 B60L2240/72 B60L2240/80 B60L2250/10 B60L2250/16 B60L2260/52 B60L2260/54 B60L2260/58 G06Q30/0283 Y02T90/127 G06Q10/0631 G06Q50/30 H02J3/006 B60L2240/622 G06Q10/06 H02J2003/388 Y02T90/162 G06Q40/04 Y04S10/58 G06Q20/102 G06Q30/0273 G06Q30/0277 G06Q30/06 Y04S50/12 Y02T10/7094 G06Q20/10 G06Q30/04 H04L41/12 H04L67/18 H04W4/02 H04W4/023 H04W4/043 H04W64/00 Y10T307/696 H02J3/008 H02J3/32 H02J3/38 H02J7/04 H02J7/34 H02J13/0082 Y02E60/721 Y02E60/722 Y02E60/7815 Y02T10/7005 Y02T10/7072 Y02T90/128 Y02T90/14 Y02T90/16 Y02T90/163 Y02T90/169 Y04S10/126 Y04S10/14 Y04S10/60 Y04S30/14 Y04S40/121 Y04S50/00 Y04S50/10 Y04S50/14 G05B13/026 H02J7/0021 H02J7/007 B60L11/1844 G06Q30/0202 Y02T90/121 G06Q50/06 H02J5/00 Y02D70/00 Y02D70/1242 Y02D70/142 Y02D70/146 Y02D70/164 Y02D70/166 Y02D70/122 H02J7/02

European: B60L11/18L2 B60L11/18L4 B60L11/18L7 B60L11/18L7J B60L11/18L7J2 B60L11/18L7J4 B60L11/18L7J6 B60L11/18L7J8 B60L3/12 G01D4/00R1 G01R21/133 G06Q10/06 G06Q10/0631 G06Q20/10 G06Q20/102 G06Q30/0202 G06Q30/0273 G06Q30/0277 G06Q30/0283 G06Q30/04 G06Q30/06 G06Q40/04 G06Q50/00 G06Q50/06 G06Q50/30 H02J13/00F4D H02J13/00F4D2 H02J13/00F4F H02J3/00T H02J3/32 H02J3/38 H02J7/04 H02J7/34 H04L12/46B7B H04L29/08N11 H04L29/08N11M H04L29/08N17 H04L41/12 H04W4/02 H04W4/02M H04W4/04B L60L230/16 L60L230/34 L60L240/62B L60L240/70 L60L240/72 L60L240/80 L60L250/10 L60L250/16 L60L260/52 L60L260/54 L60L260/58 L60L270/32 L60L270/34 T02J13/00F4D T02J13/00F4F T02J3/00T T02J3/32 T02J3/38 T04W64/00 Y02B90/24B2 Y02B90/26B10 Y02E40/72 Y02E40/76 Y02E60/72B Y02E60/72D Y02T10/70B Y02T10/70J4 Y02T10/70J4B Y02T10/72D8 Y02T90/12B Y02T90/12J Y02T90/12L Y02T90/14 Y02T90/16 Y02T90/16B2 Y02T90/16D Y02T90/16F2 Y02T90/16F4 Y04S10/12D Y04S10/14 Y04S10/54B Y04S10/60 Y04S20/32B Y04S30/12 Y04S30/14 Y04S40/12J Y04S50/10

US: 1/1 180/65.21 180/65.29 307/80 315/80 320/101 320/107 320/109 320/137 340/12.37 340/12.51 340/310.11 342/357.25 342/457 342/464 37/231 439/43 455/434 49/139 700/286 700/287 700/291 700/292 700/293 700/295 700/296 701/22 701/31.4 701/31.5 701/33 702/62 705/1 705/1.1 705/13 705/14 705/14.1 705/14.13 705/14.14 705/14.69 705/14.73 705/32 705/37 705/39 705/40 705/400 705/412 705/63 705/7.12 705/7.29 705/7.31 705/7.35 705/72 705/8 709/217 709/218 709/219 709/224



Family:

Publication number	Publication date	Application number	Application date
BRPI0719998 A2	20140318	BR2007PI19998	20071211
BRPI0719999 A2	20140318	BR2007PI19999	20071211
BRPI0720002 A2	20131217	BR2007PI20002	20071211
BRPI0720300 A2	20140204	BR2007PI20300	20071211
BRPI0720301 A2	20140204	BR2007PI20301	20071211
CA2672422 AA	20080619	CA20072672422	20071211
CA2672424 AA	20080619	CA20072672424	20071211
CA2672454 AA	20080619	CA20072672454	20071211
CA2672508 AA	20081127	CA20072672508	20071211
CA2705913 AA	20090423	CA20082705913	20081017
CN101678774 A	20100324	CN200780050055	20071211
EP2097289 A2	20090909	EP20070867730	20071211
EP2099639 A2	20090916	EP20070867731	20071211
EP2102028 A1	20090923	EP20070862801	20071211
EP2115686 A2	20091111	EP20070874172	20071211
EP2210327 A2	20100728	EP20080839095	20081017
IL199248 A0	20100328	IL20070199248	20071211
IL199291 A0	20100328	IL20070199291	20071211
IL199292 A0	20100328	IL20070199292	20071211
IL199293 A0	20100328	IL20070199293	20071211
IL199294 A0	20100328	IL20070199294	20071211
IL205161 A0	20101130	IL20080205161	20081017
JP2010512727 T2	20100422	JP20090541356T	20071211

KR20090119754 A	20091119	KR20097014274	20071211
KR20090119831 A	20091120	KR20097014273	20071211
KR20090119832 A	20091120	KR20097014278	20071211
KR20090119833 A	20091120	KR20097014279	20071211
KR20100014304 A	20100210	KR20097014276	20071211
MX20090006236 A1	20100211	MX20090006236	20071211
MX20090006237 A1	20100211	MX20090006237	20071211
MX20090006238 A1	20100211	MX20090006238	20071211
MX20090006239 A1	20100211	MX20090006239	20071211
MX20090006240 A1	20100211	MX20090006240	20071211
US2008039979 AA	20080214	US20070836752	20070809
US2008039980 AA	20080214	US20070836749	20070809
US2008039989 AA	20080214	US20070836756	20070809
US2008040223 AA	20080214	US20070836743	20070809
US2008040263 AA	20080214	US20070836760	20070809
US2008040295 AA	20080214	US20070836741	20070809
US2008040296 AA	20080214	US20070836745	20070809
US2008040479 AA	20080214	US20070836747	20070809
US2008052145 AA	20080228	US20070837407	20070810
US2009040029 AA	20090212	US20080252209	20081015
US2009043519 AA	20090212	US20080252657	20081016
US2009043520 AA	20090212	US20080252950	20081016
US2009063680 AA	20090305	US20080252803	20081016
US2009066287 AA	20090312	US20080253044	20081016
US2009200988 AA	20090813	US20090427958	20090422
US2011025556 AA	20110203	US20100826282	20100629
US2015077056 AA	20150319	US20140462117	20140818
US2015208331 AA	20150723	US20140553480	20141125
US2016347195 AA	20161201	US20160234843	20160811
US2018098271 AA	20180405	US20170488029	20170414
US7747739 BB	20100629	US20070836747	20070809
US7844370 BB	20101130	US20070836749	20070809
US7949435 BB	20110524	US20070836756	20070809
US8810192 BB	20140819	US20090427958	20090422
US8898278 BB	20141125	US20080252803	20081016
US9436948 BB	20160906	US20140462117	20140818
US9674771 BB	20170606	US20140553480	20141125
WO08073453 A1	20080619	WO2007US25393	20071211
WO08073470 A2	20080619	WO2007US25433	20071211
WO08073470 A3	20080821	WO2007US25433	20071211
WO08073472 A2	20080619	WO2007US25436	20071211
WO08073472 A3	20080807	WO2007US25436	20071211
WO08073474 A2	20080619	WO2007US25439	20071211
WO08073474 A3	20080807	WO2007US25439	20071211
WO08073476 A2	20080619	WO2007US25443	20071211
WO08073476 A3	20080807	WO2007US25443	20071211
WO08073477 A2	20080619	WO2007US25444	20071211
WO08073477 A3	20080807	WO2007US25444	20071211
WO08143653 A2	20081127	WO2007US25442	20071211
WO08143653 A3	20090416	WO2007US25442	20071211
WO09052446 A2	20090423	WO2008US80389	20081017
WO09052446 A3	20090723	WO2008US80389	20081017
WO09052447 A2	20090423	WO2008US80390	20081017
WO09052447 A3	20090618	WO2008US80390	20081017
WO09052448 A2	20090423	WO2008US80392	20081017
WO09052448 A3	20090716	WO2008US80392	20081017
WO09052450 A2	20090423	WO2008US80394	20081017
WO09052450 A3	20090618	WO2008US80394	20081017
WO09052451 A2	20090423	WO2008US80395	20081017
WO09052451 A3	20090806	WO2008US80395	20081017

Priority:

US20060822047P	20060810	US20060869439P	20061211	US20070836743	20070809
US20070836741	20070809	US20070836745	20070809	US20070836747	20070809
US20070836752	20070809	US20070915347P	20070501	US20070836749	20070809
US20070836756	20070809	US20070836760	20070809	US20070837407	20070810
US20070980663P	20071017	US20080252209	20081015	WO2007US25444	20071211
WO2007US25443	20071211	WO2007US25393	20071211	WO2007US25442	20071211
WO2007US25439	20071211	US20080252657	20081016	US20080252950	20081016
US20080252803	20081016	US20080253044	20081016	US20100826282	20100629
US20140553480	20141125	US20140462117	20140818	US20090427958	20090422
WO2008US80389	20081017	US20160234843	20160811	US20170488029	20170414

Probable Assignee: V2GREEN INC

Assignee(s): (std): BRIDGES SETH W ; GRIDPOINT INC ; KAPLAN DAVID L ; POLLACK SETH B ; V2GREEN INC ; V2 GREEN INC

Assignee(s): MCHENRY LLC

Inventor(s): (std): BRIDGE SETH W ; BRIDGES SETH W ; KAPLAN DAVID L ; POLLACK SETH B

Inventor(s): SETH B POLLACK ; SETH W BRIDGES ; POLLACK SETH ; DAVID L KAPLAN ; KAPLAN DAVID ; BRIDGES SETH ; BRIDGE SETH

Agent(s): KIRBY EADES GALE BAKER; CORDINA KEVIN JOHN; ONO SHINJIRO; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; LEE AND HAYES PLLC; LEE AND HAYES PLLC SUITE 500; GREENBERG TRAUIG LLP; BOOKOFF MCANDREWS PLLC; FARRELL MARK ET AL; PECK ROBERT C ET AL; LEE LEWIS C ET AL; HAYES DANIEL L ET AL; HAN J MARK 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 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: **SYSTEM** FOR PUMPING HYDRAULIC FRACTURING FLUID USING ELECTRIC PUMPS

Abstract: Source: US2014138079A [EN] A **system** for hydraulically fracturing an underground formation in an oil or gas well to extract oil or gas from the formation, the oil or gas well having a wellbore that permits passage of fluid from the wellbore into the formation. The **system** includes a plurality of electric pumps fluidly connected to the well, and configured to pump fluid into the wellbore at high pressure so that the fluid passes from the wellbore into the and fractures the formation. The **system** can also include a plurality of natural gas powered generators electrically connected to the plurality of electric pumps to provide electrical power to the pumps.

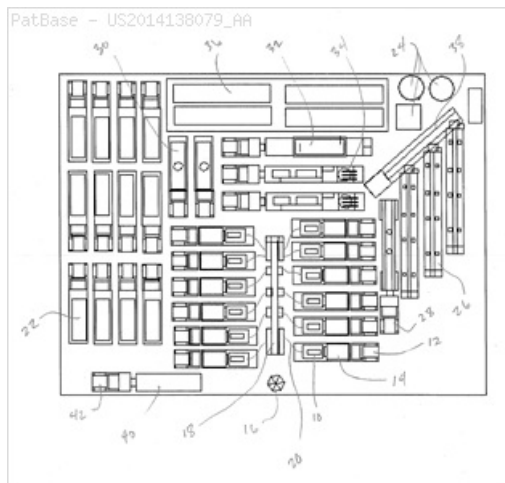
Classifications:

International (IPC 8-9): B01F15/00 B01F15/02 E21B17/20 E21B23/08 E21B29/00 E21B33/12 E21B41/00 E21B43/116 E21B43/117 E21B43/12 E21B43/26 E21B43/267 E21B47/00 F01D15/08 F01D15/10 F01D25/12 F02B43/08 F02B43/10 F02B63/04 F02C3/22 F02C7/143 F02C7/16 F02C7/22 F02C7/36 F02M21/00 F02M25/00 F02M33/00 F02M37/22 F04B15/02 F04B17/00 F04B17/03 F04B19/22 F04B23/04 F04B35/04 F04B47/00 F04B47/02 F04B49/06 F04B49/20 F04B51/00 F04B9/02 F04D13/02 F04D13/06 F04D29/044 F04D29/66 F16D3/02 F16D3/18 F16D3/64 F16F15/067 F16L55/04 F23R3/28 F24F13/30 G05B19/042 G05B19/46 H02B13/00 H02B7/06 H02J11/00 H02K7/14 H02K7/18 H02P1/30 H02P21/00 H02P23/00 H02P27/04 H02P29/02 H02P29/024 H02P5/74 H04N7/18 (Advanced/Invention);

E21B7/02 (Advanced/Non-invention)

CPC: H02P29/02 F04B47/06 G05B19/0428 G05B19/46 G05B2219/45004 G05B2219/37303 H02P1/30 B01F15/0235 B01F15/00538 B01F15/00519 F16F15/067 F16L55/041 F16F3/04 B01F2215/0081 F04B17/06 F04B23/00 F04B9/02 F04D29/044 H04N7/185 E21B43/26 E21B23/08 F04B49/065 F04B53/003 F04B47/00 F04B15/02 F04B49/06 F04B51/00 F02B43/08 F02B43/10 F02M37/22 F02B63/04 H02P21/00 H02P29/024 H02K7/1815 F02B2043/103 F02C7/143 F02C7/16 F05D2220/76 F05D2260/213 H02B7/06 E21B41/00 F04D29/66 E21B43/267 F04B37/12 F05D2220/32 F04B9/10 F04B2203/0209 F01D15/08 F01D15/10 H02K7/1823 E21B41/0085 H02P23/00 F02C3/22 F04B17/03 F04B23/04 F04B35/04 F04B47/02 F04B49/20

US: 1/1 166/177.5 166/250.01 166/308.1 166/53 166/65.1 166/66.4 175/4.57 366/183.1 417/423.1 700/283



Family:

Publication number	Publication date	Application number	Application date
CA2833711 AA	20140516	CA20132833711	20131115
CA2886697 AA	20160813	CA20152886697	20150330
CA2928704 AA	20161103	CA20162928704	20160503
CA2928707 AA	20161103	CA20162928707	20160503
CA2928711 AA	20161103	CA20162928711	20160503
CA2928717 AA	20161103	CA20162928717	20160503
CA2933444 AA	20161216	CA20162933444	20160616
CA2943275 AA	20170415	CA20162943275	20160927
CA2944968 AA	20170213	CA20162944968	20160812
CA2944980 AA	20170212	CA20162944980	20160812
CA2945281 AA	20170415	CA20162945281	20161014
CA2945579 AA	20170416	CA20162945579	20161017
CA2945580 AA	20170416	CA20162945580	20161017
CA2964593 AA	20171015	CA20172964593	20170418
CA2964595 AA	20171015	CA20172964595	20170418
CA2964597 AA	20171015	CA20172964597	20170418
US2014138079 AA	20140522	US20120679689	20121116
US2014174717 AA	20140626	US20140190982	20140226
US2015211524 AA	20150730	US20150622532	20150213
US2016032703 AA	20160204	US20150884363	20151015
US2016273328 AA	20160922	US20160145491	20160503
US2016290114 AA	20161006	US20160183387	20160615
US2016319649 AA	20161103	US20160145440	20160503
US2016319650 AA	20161103	US20160145443	20160503
US2016326854 AA	20161110	US20160202085	20160705
US2016348479 AA	20161201	US20160235788	20160812
US2016349728 AA	20161201	US20160235716	20160812
US2017028368 AA	20170202	US20160294349	20161014
US2017030178 AA	20170202	US20160291842	20161012
US2017037717 AA	20170209	US20160145414	20160503
US2017096885 AA	20170406	US20160293681	20161014
US2017218727 AA	20170803	US20170487656	20170414
US2017218843 AA	20170803	US20170486970	20170413
US2017222409 AA	20170803	US20170487694	20170414
US2017226839 AA	20170810	US20170581625	20170428
US2017314380 AA	20171102	US20170653028	20170718
US8789601 BB	20140729	US20140190982	20140226
US9410410 BB	20160809	US20120679689	20121116
US9611728 BB	20170404	US20160145440	20160503
US9650879 BB	20170516	US20150622532	20150213
US9745840 BB	20170829	US20160291842	20161012
US9840901 BB	20171212	US20160293681	20161014
US9893500 BB	20180213	US20170487694	20170414

Priority:

US20120679689	20121116	US20140190982	20140226	US20150156303P	20150503
US20150156301P	20150503	US20150156306P	20150503	US20140487694	20140414
US20150180289P	20150616	US20150180140P	20150616	US20150156307P	20150503
US20150204842P	20150813	US20150204331P	20150812	US20150242657P	20151016
US20150242173P	20151015	US20150242566P	20151016	US20150622532	20150213
US20150884363	20151015	US20160145491	20160503	US20160183387	20160615
US20160145440	20160503	US20160145443	20160503	US20160202085	20160705
US20160235788	20160812	US20160235716	20160812	US20160294349	20161014
US20160291842	20161012	US20160145414	20160503	US20160293681	20161014
US20160323236P	20160415	US20160323168P	20160415	US20160020085	20160705
US20170487656	20170414	US20160323303P	20160415	US20170486970	20170413
US20170487694	20170414	US20170581625	20170428	US20170653028	20170718

Probable Assignee: US WELL SERVICES LLC

Assignee(s): (std): US WELL SERVICES LLC ; U S WELL SERVICES LLC

Assignee(s): KURTZ ROBERT ; MCPHERSON JEFF ; OEHRING JARED ; HINDERLITER BRANDON NEIL ; BROUSSARD JOEL N ; BROWN ARTHUR ; HINDERLITER BRANDON ; HINDERLITER BRANDON N

Inventor(s): (std): BROUSSARD JOEL N ; HINDERLITER BRANDON ; HINDERLITER BRANDON N ; KURTZ ROBERT ; MCPHERSON JEFF ; OEHRING JARED ; HINDERLITER BRANDON NEIL ; BROWN ARTHUR

Agent(s): FINLAYSON AND SINGLEHURST; BERESKIN AND PARR LLP SENCRL SRL; BRACEWELL AND GIULIANI LLP; JEFFREY S; TAYLOR P; BRACEWELL LLP; HOGAN LOVELLS US LLP

Title: WATER CURRENT POWER GENERATION **SYSTEM**

Abstract: Source: US2010013231A [EN] A water current power generation **system** is provided, including a plurality of flotation tubes joined by a body structure; a plurality of ballast chambers joined by a body structure; a plurality of induction type power generation units disposed within housings associated with one or more of the flotation chambers, ballast chambers and body structure; and a plurality of propellers disposed in mechanical communication with each of the induction type generator units. Methods and means of deploying, positioning, maintaining, controlling and operating the **system** are also provided, as are detailed descriptions of novel inductor type generators used to obtain power from fast moving water currents, flotation tanks for tensioning the **system** against a submerged anchoring **system** disposed on an associated seafloor, and fluid-filled ballast chambers equipped with multiple sub-chambers that lend precision control and continuous adjustability to the **system**.

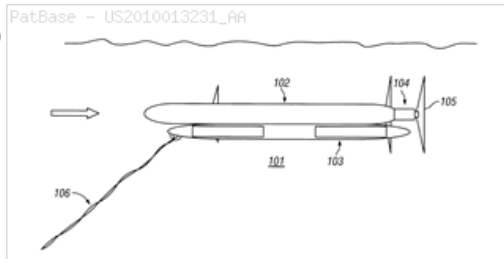
Classifications:

International (IPC 8-9): B23P11/00 B63B1/20 B63B21/04 B63B21/20 B63B21/24 B63B22/04 B63B35/00 B63B35/44 B63G8/22 B63H B63H1/00 B63H13/00 B64C D07B1/02 D07B1/14 E02B9/00 E02B9/06 F01D5/22 F03B F03B11/00 F03B13/00 F03B13/10 F03B13/12 F03B13/18 F03B13/20 F03B13/26 F03B17/00 F03B17/02 F03B17/04 F03B17/06 F03B3/04 F03B3/12 F03B7/00 F03D F03D9/00 F15D F16G9/00 H02G9/12 H02J3/38 H02K44/08 H02P9/04 (Advanced/Invention); B63H1/38 D07B1/14 F03B13/10 F03B13/22 F03B17/06 F03B7/00 F03D9/00 (Advanced/Non-invention); B23P11/00 B63H1/00 B63H13/00 E02B9/00 F03B11/00 F03B13/00 F03B17/00 F03B3/00 F03B7/00 (Core/Invention); F03B3/04 F03B3/12 (Core/Non-invention); B63H B64C F03B F03D F03G (Subclass/Invention)

CPC: F03B13/264 F03B17/061 Y02E10/28 Y02E10/38 Y02E10/725 Y02E10/22 B63B2035/4466 F05B2270/18 F05B2240/40 F05B2240/93 F05B2240/97 D07B1/02 D07B1/147 D07B2201/108 D07B2401/2015 D07B2501/2061 Y10T29/49826 F03B17/064 F03B13/10 F03B13/26 F03B17/06

European: F03B13/10 F03B13/26 F03B13/26C F03B17/06 F03B17/06B R05B240/40 R05B240/93 R05B240/97 Y02E10/28 Y02E10/38

US: 114/294 29/428 290/43 290/53 290/54 290/54P 290/55 416/169.00RS 416/169R 416/170.00RS 416/170R 416/179 416/179P 416/179S 416/85 416/85P

**Family:**

Publication number	Publication date	Application number	Application date
AP200804701 A0	20081231	AP20080004701	20081210
AP201005184 A0	20100430	AP20100005184	20100302
AP201005329 A0	20100831	AP20100005329	20100302
AP201206399 A0	20120831	AP20120006399	20120730
AP201206495 A0	20121031	AP20120006495	20120730
AP201206496 A0	20121031	AP20120006496	20120730
AP2600 A	20130225	AP20080004701	20081210
AP3779 A	20160831	AP20100005329	20100302
AP3857 A	20161031	AP20100005184	20100302
AP3871 A	20161031	AP20120006496	20120730
AT500419 E	20110315	AT20080169444T	20081119
AU2008255182 AA	20100204	AU20080255182	20081209
AU2008255182 BB	20110120	AU20080255182	20081209
AU2010200574 BA	20110106	AU20100200574	20100217
AU2010201415 AA	20110120	AU20100201415	20100409
AU2012205263 AA	20131107	AU20120205263	20120720
AU2012213966 AA	20131107	AU20120213966	20120815
AU2012213966 BB	20150115	AU20120213966	20120815
AU2012213967 AA	20131107	AU20120213967	20120815
AU2012213967 BB	20141106	AU20120213967	20120815
AU2013201373 AA	20130328	AU20130201373	20130308
AU2013201373 BB	20150716	AU20130201373	20130308
AU2014277769 AA	20150122	AU20140277769	20141218
AU2014277769 BB	20160218	AU20140277769	20141218
AU2014277769 BI	20160324	AU20140277769	20141218
BR102012023160 A2	20140506	BR20121023160	20120913
BR122013011260 A2	20150804	BR20131211260	20120913
BR122013011266 A2	20150714	BR20131211266	20120913
BRPI0804991 A2	20100406	BR2008PI04991	20081113
BRPI1001623 A2	20110726	BR2010PI01623	20100510
BRPI1005790 A2	20130730	BR2010PI05790	20100510
DE602008005295 D1	20110414	DE200860005295T	20081119
DE602010004056 D1	20130207	DE201060004056T	20100715
DE602010004779 D1	20130321	DE201060004779T	20100715
DE602013005466 D1	20160428	DE201360005466T	20130423
DE602013006628 D1	20160609	DE201360006628T	20130423
DK2146089 T3	20110606	DK20080169444T	20081119
DK2320069 T3	20130318	DK20100169624T	20100715
DK2320070 T3	20130218	DK20100169625T	20100715
DK2657124 T3	20160801	DK20130165153T	20130423
DK2657512 T3	20160613	DK20130165147T	20130423
EA014951 B1	20110429	EA20100000412	20100330
EA014952 B1	20110429	EA20100000528	20100330
EA018743 B1	20131030	EA20120070726	20120723
EA021599 B1	20150730	EA20120070725	20120723
EA201000412 A1	20110429	EA20100000412	20100330

EA201000528 A1	20110429	EA20100000528	20100330
EA201270665 A1	20131030	EA20120070665	20120723
EA201270725 A1	20140130	EA20120070725	20120723
EA201270726 A1	20130430	EA20120070726	20120723
EP2146089 A1	20100120	EP20080169444	20081119
EP2146089 B1	20110302	EP20080169444	20081119
EP2320069 A2	20110511	EP20100169624	20100715
EP2320069 A3	20111019	EP20100169624	20100715
EP2320069 B1	20130123	EP20100169624	20100715
EP2320070 A2	20110511	EP20100169625	20100715
EP2320070 A3	20111019	EP20100169625	20100715
EP2320070 B1	20121212	EP20100169625	20100715
EP2657122 A2	20131030	EP20130164887	20130423
EP2657122 A3	20150211	EP20130164887	20130423
EP2657124 A2	20131030	EP20130165153	20130423
EP2657124 A3	20140806	EP20130165153	20130423
EP2657124 B1	20160420	EP20130165153	20130423
EP2657512 A2	20131030	EP20130165147	20130423
EP2657512 A3	20140806	EP20130165147	20130423
EP2657512 B1	20160316	EP20130165147	20130423
ES2362319 T3	20110701	ES20080169444T	20081119
ES2401368 T3	20130419	ES20100169625T	20100715
ES2404356 T3	20130527	ES20100169624T	20100715
ES2576002 T3	20160704	ES20130165147T	20130423
ES2582490 T3	20160913	ES20130165153T	20130423
ID201706084 A	20170609	ID2016P0000734	20160203
JP2010025100 A2	20100204	JP20080314231	20081210
JP2011099433 A2	20110519	JP20100093613	20100415
JP2011099434 A2	20110519	JP20100209551	20100917
JP2013227962 A2	20131107	JP20120205388	20120919
JP2013227963 A2	20131107	JP20120240064	20121031
JP2013227964 A2	20131107	JP20120240065	20121031
JP5050077 B2	20121017	JP20100093613	20100415
JP5675243 B2	20150225	JP20100209551	20100917
JP6055652 B2	20161227	JP20120240065	20121031
KR101105063 B1	20120113	KR20090005776	20090123
KR101192140 B1	20121017	KR20100043397	20100510
KR101237132 B1	20130225	KR20100045860	20100517
KR101548038 B1	20150827	KR20120098289	20120905
KR101548039 B1	20150904	KR20120098290	20120905
KR20100008747 A	20100126	KR20090005776	20090123
KR20110051126 A	20110517	KR20100043397	20100510
KR20110051128 A	20110517	KR20100045860	20100517
KR20130119825 A	20131101	KR20120098042	20120905
KR20130119826 A	20131101	KR20120098289	20120905
KR20130119827 A	20131101	KR20120098290	20120905
MX2008014760 A1	20100323	MX20080014760	20081120
MX2010002907 A1	20110509	MX20100002907	20100316
MX2010004264 A1	20110524	MX20100004264	20100419
MX2012011042 A1	20131023	MX20120011042	20120924
MX342596 B	20161005	MX20130003493	20120924
PH2012000318 A	20140526	PH20120000318	20121019
PH2013000111 A	20141210	PH20130000111	20130417
PH2013000111 B	20141210	PH20130000111	20130417
PH2013000112 A	20141117	PH20130000112	20130417
PH2013000112 B	20141117	PH20130000112	20130417
PT2146089 T	20110517	PT20080169444T	20081119
PT2320069 T	20130403	PT20100169624T	20100715
PT2320070 T	20130227	PT20100169625T	20100715
PT2657124 T	20160725	PT20130165153T	20130423
PT2657512 T	20160617	PT20130165147T	20130423
TW201005178 A	20100201	TW20080142688	20081105
TW201116711 A	20110516	TW20100106210	20100303
TW201116712 A	20110516	TW20100117971	20100303
TW201343477 A	20131101	TW20120130671	20120823
TW201344044 A	20131101	TW20120130673	20120823
TW201345106 A	20131101	TW20120130672	20120823
TWI437163 B	20140511	TW20080142688	20081105
TWI481779 B	20150421	TW20100117971	20100303
TWI482390 B	20150421	TW20120130672	20120823
TWI486519 B	20150601	TW20100106210	20100303
TWI548810 B	20160911	TW20120130673	20120823
TWI598268 B	20170911	TW20120130671	20120823
US2010013231 AA	20100121	US20080252540	20081016
US2010232962 AA	20100916	US20100788099	20100526
US2011109090 AA	20110512	US20100702546	20100209
US2011217174 AA	20110908	US20110109451	20110517
US2012292911 AA	20121122	US20120454608	20120424
US7851936 BB	20101214	US20080252540	20081016
US8288882 BB	20121016	US20110109451	20110517
US8847421 BB	20140930	US20120454608	20120424

WO1008249 A1	20100311	WO2008US13832	20080909
WO11056249 A3	20111110	WO2010US23598	20100209
WO13162520 A2	20131031	WO2012US34806	20120424
WO13162520 A3	20140410	WO2012US34806	20120424
ZA200810056 A	20101027	ZA20080010056	20081126
ZA201001423 A	20110428	ZA20100001423	20100226
ZA201006620 A	20110831	ZA20100006620	20100915
ZA201306332 A	20141223	ZA20130006332	20120724
ZA201306333 A	20141029	ZA20130006333	20120724

Priority:

AU20100200574 20100217	AU20100201415 20100409	AU20130201373 20130308
AU20120205263 20120720	AU20120213966 20120720	AU20120213967 20120720
JP20100093613 20100415	EP20130164887 20130423	AU20140277769 20141218
BR20121023160 20120913	EP20100169625 20100715	EP20100169624 20100715
EP20130165153 20130423	EP20130165147 20130423	US20080135072P 20080716
US20080252540 20081016	US20100702546 20100209	US20090259359P 20091109
US20100788099 20100526	US20110109451 20110517	US20120454608 20120424
JP20120205388 20120919		

Probable Assignee: ANADARKO PETROLEUM CORP

Assignee(s): (std): ANADARKO PETROLEUM CORP ; BOLIN WILLIAM D

Assignee(s): ANADARKO PETROLEUM CORP WOODLANDS ; ANADARKO PETROLEUM CORPORATION

Inventor(s): (std): WILLIAM D BOLIN ; BOLIN WILLIAM D

Inventor(s): BOLIN WILLIAM D SPRING ; BOLIN WILLIAM D SPRING TX

Agent(s): DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; BARDEHLE PAGENBERG PARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; SCHNEIDERS AND BEHRENDT RECHTS U PATENTANWAELTE; WEGNER HANS; HESS PETER K G; FABREGA XAVIER; CARPINTERO MARIO; NADIA AM BADAR SH LLM; ASAMURA PATENT OFFICE PC; ANGARA ABELLO CONCEPCION REGALA AND CRUZ; ADAMS AND REESE LLP; RAYMOND R; FERRERA RAYMOND R

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 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 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

Title: POWER GENERATION **SYSTEM** INCLUDING MULTIPLE **MOTORS**/GENERATORS

Abstract: Source: US2009021021A [EN] An **electric power-generating system** configured to convert a source of energy to electricity by turning a rotor shaft with the source of energy includes a mounting plate coupled to the rotor shaft, a drive gear coupled to the rotor shaft and configured to move when the rotor shaft moves, and a plurality of **motor/generator devices** mounted to the mounting plate. Each **motor/generator device** includes an output shaft configured to rotatably couple with the drive gear. Each **motor/generator device** couples independently to the drive gear to provide a plurality of redundant power generating **motor/generator devices**.

Classifications:

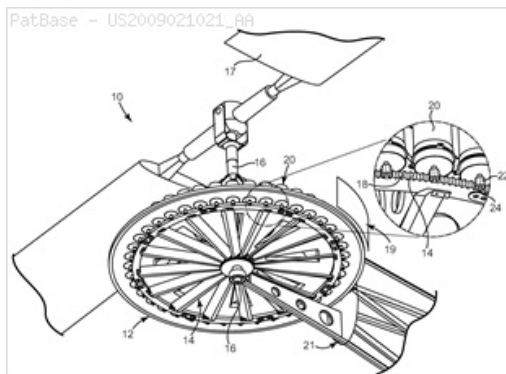
International (IPC 8-9): B64C27/06 B64C27/08 B64C29/00
F01D5/14 F03D F03D11/02 F03D3/02 F03D3/06 F03D7/00 F03D9/00
F03D9/25 H02K7/116 H02P9/04 (Advanced/Invention);
F03D11/02 F03D9/00 F16H1/14 F16H35/18 F16H57/08
H02K7/116 (Advanced/Non-invention);
F01D5/14 F03D3/00 F03D7/00 F03D9/00 H02P9/04 (Core/Invention);
F03D (Subclass/Invention)

International (IPC 1-7): F03D3/06

CPC: F05B2210/16 F05B2210/18 F05B2240/40 F05B2240/92
F05B2260/4031 F05B2280/4009 F05C2225/10 F05C2225/12
F16H1/22 Y02E10/725 Y10T74/19507 Y10T74/19521 Y10T74/19642
Y10T74/19656 Y10T74/1966 Y10T74/19665 Y10T74/19684
F03D15/00

European: F03D11/02 R05B210/16 R05B210/18 R05B240/40
R05B240/92 R05B260/4031 R05B280/4009 R05C225/10 R05C225/12
R16H1/22 Y02E10/72 Y02E10/72D Y02E10/72H

US: 244/12.2 244/16 244/17.11 244/17.110P 244/17.23 244/17.25
244/23C 244/30 244/33 290/43 290/44 290/44P 290/54 290/55 290/55P 290/55S 415/4.3 616/189 74/381 74/385 74/412R
74/415 74/416 74/417 74/421A



Family:

Publication number	Publication date	Application number	Application date
AU2009270766 AA	20100121	AU20090270766	20090717
AU2009270766 BB	20140220	AU20090270766	20090717
BRPI0916226 A2	20151103	BR2009PI16226	20090717
CA2730937 AA	20110114	CA20092730937	20090717
CN102159831 A	20110817	CN200980136300	20090717
CN102159831 B	20150715	CN200980136300	20090717
DE602009016075 D1	20130725	DE200960016075T	20090717
EP2326831 A2	20110601	EP20090790601	20090717
EP2326831 B1	20130529	EP20090790601	20090717
ES2432079 T3	20131129	ES20090790601T	20090717
HK1158290 A1	20140214	HK20110112658	20111122
HK1158290 A3	20120713	HK20110112658	20111122
IN00683KN2011 A	20110429	IN2011KN00683	20110214
JP2011528548 T2	20111117	JP20110518946T	20090717
JP5591802 B2	20140917	JP20110518946T	20090717
KR20110079610 A	20110707	KR20117003573	20090717
MX2011000677 A1	20110620	MX20110000677	20090717
RU2011105823 A	20120827	RU20110105823	20090717
RU2536642 C2	20141227	RU20110105823	20090717
US2009021021 AA	20090122	US20080175416	20080717
US2010156102 AA	20100624	US20100702686	20100209
US2011031344 AA	20110210	US20100907883	20101019
US7675189 BB	20100309	US20080175416	20080717
US7816800 BB	20101019	US20100702686	20100209
US8444081 BB	20130521	US20100907883	20101019
WO10009431 A2	20100121	WO2009US51050	20090717
WO10009431 A3	20110106	WO2009US51050	20090717
ZA201103933 A	20120829	ZA20110003933	20090717

Priority:

EP20090790601 20090717 US20070950149P 20070717 US20080175416 20080717
US20100702686 20100209 US20100907883 20101019 WO2009US51050 20090717

Probable Assignee: JST LLC

Assignee(s): (std): BASELOAD ENERGY INC ; BEJSLOUD EHNERDZHI INK ; GRENIER ALBERT ; GRENIER ALBERT J ; JST LLC

Assignee(s): JST LLC NDGESD STAATES DELAWARE PORTLAND

Inventor(s): (std): ALBERT GRENIER ; GREN E ALBERT ; GRENIER ALBERT ; GRENIER ALBERT J

Inventor(s): GRENIER ALBERT RAMONA

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; ZIMMERMANN AND PARTNER PATENTANWAELTE MBB; NOBLE NICHOLAS; DE ELZABURU ALBERTO; DICKE BILLIG AND CZAJA; DICKE BILLIG AND CZAJA PLLC; BILLIG PATRICK 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 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 PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: REDOX FLOW BATTERY **SYSTEM** FOR DISTRIBUTED ENERGY STORAGE

Abstract: Source: US2010003545A [EN] A large stack redox flow battery **system** provides a solution to the energy storage challenge of many types of renewable energy **systems**. Independent reaction cells arranged in a cascade configuration are configured according to state of charge conditions expected in each cell. The large stack redox flow battery **system** can support multi-megawatt implementations suitable for use with power grid applications. Thermal integration with energy generating **systems**, such as fuel cell, wind and **solar systems**, further maximize total energy efficiency. The redox flow battery **system** can also be scaled down to smaller applications, such as a gravity feed **system** suitable for small and remote site applications.

Classifications:

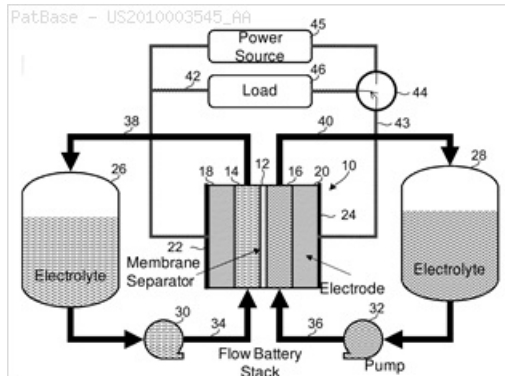
International (IPC 8-9): B60L11/18 H01M10/02 H01M10/50
H01M2/36 H01M2/38 H01M4/36 H01M6/18 H01M6/42 H01M6/46
H01M8/00 H01M8/02 H01M8/04 H01M8/18 H01M8/20 H01M8/24
H02J7/00 (Advanced/Invention);
H01M2/40 H01M8/02 H01M8/04 H01M8/20 H01M8/24 (Advanced/Non-invention);
H01M4/36 H01M8/00 H01M8/02 H01M8/04 H01M8/20
H01M8/24 (Core/Invention);
H01M (Subclass/Invention)

International (IPC 1-7): H01M8/20

CPC: H01M6/188 H01M2/40 Y02T10/7088 B60L2200/26
Y10T29/49108 B60L11/1824 B60L11/1879 B60L2210/40
B60L2230/22 B60L2230/24 B60L2230/28 B60L2230/30 H01M8/04186
H01M8/04201 H01M8/04276 H01M8/188 H01M8/20 H01M8/2455
H01M8/249 H01M2220/10 Y02B10/30 Y02E60/528 Y02T10/7005
Y02T10/705 Y02T10/7094 Y02T10/7241 Y02T90/12 Y02T90/121
Y02T90/127 Y02T90/14 H01M8/02 H01M8/04 H01M8/18 H01M8/24
H01M8/0258 H01M8/0271 H01M8/241 H01M8/0267

European: B60L11/18L7 B60L11/18M38 H01M8/18C4 H01M8/20 L60L210/40 L60L230/22 L60L230/24 L60L230/28 L60L230/30
T01M2/40 Y02E60/52J

US: 29/623.1 29/623.100S 320/128 429/101 429/101S 429/105 429/105P 429/105S 429/12 429/120 429/120P 429/149
429/149S 429/152 429/406 429/406S 429/456 429/471 429/471P 429/51 429/72 429/72P

**Family:**

Publication number	Publication date	Application number	Application date
AU2009268735 AA	20100114	AU20090268735	20090707
CN102089918 A	20110608	CN200980126611	20090707
CN102089918 B	20150506	CN200980126611	20090707
CN103563150 A	20140205	CN201280004859	20120109
EP2311130 A2	20110420	EP20090795056	20090707
EP2311130 A4	20140430	EP20090795056	20090707
EP2661783 A2	20131113	EP20120732243	20120109
EP2661783 A4	20151104	EP20120732243	20120109
IN00109KN2011 A	20110325	IN2011KN00109	20110110
IN01995KN2013 A	20131101	IN2013KN01995	20130620
JP2011527509 T2	20111027	JP20110517518T	20090707
JP2014505976 T2	20140306	JP20130548609T	20120109
JP5559783 B2	20140723	JP20110517518T	20090707
KR20110033929 A	20110401	KR20117002697	20090707
US2010003545 AA	20100107	US20090498103	20090706
US2011045332 AA	20110224	US20100883511	20100916
US2011117411 AA	20110519	US20110013501	20110125
US2011223450 AA	20110915	US20110986892	20110107
US2013011702 AA	20130110	US20120345599	20120106
US2013011704 AA	20130110	US20120345575	20120106
US2015099206 AA	20150409	US20140561616	20141205
US7820321 BB	20101026	US20090498103	20090706
US8785023 BB	20140722	US20110986892	20110107
US8906529 BB	20141209	US20100883511	20100916
WO10005954 A2	20100114	WO2009US49789	20090707
WO10005954 A3	20100514	WO2009US49789	20090707
WO12094672 A2	20120712	WO2012US20656	20120109
WO12094672 A3	20120830	WO2012US20656	20120109
WO12094674 A2	20120712	WO2012US20668	20120109
WO12094674 A3	20121026	WO2012US20668	20120109
ZA201100950 A	20111026	ZA20110000950	20110207

Priority:

US20080078691	20080707	US20080078691P	20080707	US20080093017	20080829
US20100883511	20100916	US20090498103	20090706	US20080093017P	20080829
WO2009US49789	20090707	US20110986892	20110107	US20110013501	20110125
US20120345575	20120106	US20110430812P	20110107	US20110430783P	20110107
US20120345599	20120106	US20140561616	20141205	WO2012US20668	20120109

Probable Assignee: ENERVAULT CORP

Assignee(s): (std): ENERVAULT CORP ; KINOSHITA KIM ; HORNE CRAIG RICHARD ; HICKEY DARREN EDWARD ; LIN BRUCE ; KINOSHITA KIMIO ; MOSSO RON ; HICKEY DARREN ; HORNE CRAIG ; HICKEY DARREN BAWDEN ; HORNE CRAIG R ; ENERVAULT CORPORATION ; HICKEY DARREN B ; MOSSO RONALD ; MOSSO RONALD JAMES ; SHA JAY E ; BOSE DEEPAK ; CHANG ON KOK ; DURAIRAJ SUMITHA

Assignee(s): ENERGY UNITED STATES DEPARTMENT OF ; SILICON VALLEY BANK ; TOTAL ENERGY VENTURES INT SAS ; TOTAL ENERGY VENTURES INT SAS COLLATERAL AGENT

Inventor(s): (std): HICKEY DARREN B ; HICKEY DARREN EDWARD ; HORNE CRAIG ; HORNE CRAIG RICHARD ; KIM KINOSHITA ; KINOSHITA KIM ; KINOSHITA KIMIO ; LIN BRUCE ; MOSSO RON ; MOSSO RONALD JAMES ; RICHARD HORNE CRAIG ; SHA JAY E ; HICKEY DARREN BAWDEN ; HICKEY DARREN ; EDWARD HICKEY DARREN ; DURAIRAJ SUMITHA ; CHANG ON KOK ; BOSE DEEPAK ; MOSSO RONALD ;

HORNE CRAIG R

Inventor(s): HORNE CRIG RICHARD ; DARREN EDWARD HICKEY ; CRAIG RICHARD HORNE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; TOTHILL JOHN PAUL; TAKAHASHI
HAYASHI AND PARTNER PATENT ATTORNEYS INC; MARBURY LAW GROUP PLLC; HANSEN ROBERT
MAGNUS; HANSEN ROBERT 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 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 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

Title: **SYSTEM** AND METHOD FOR PROVIDING A CONSTANT OUTPUT FROM A VARIABLE FLOW INPUT

Abstract: Source: US2012115662A [EN] A **system** and method for providing a constant output from a variable flow input comprises a liquid flow energy input, for example, air or water for driving a constant **speed** generator. An inner and outer cam assembly is controlled by a control input to achieve varying eccentricity and control the output **speed** at an output shaft to be constant despite a varying rotational velocity input at an input shaft. A feedback control may be provided between one of the input shaft and the output shaft and the inner and outer cam assembly to maintain constant output by varying the eccentricity. The constant output may drive a constant **speed** generator having an infinitely variable torque generator. In this manner, a power grid may be provided with constant frequency **alternating current** at, for example, 50 Hz (Europe) or 60 Hz (USA). Also, a pair of non-circular gears, for example, a square gear and a cloverleaf gear may be used to reduce ripples in rotational velocity measured at the output shaft for a four OWCB constant output, variable flow input **system**.

Classifications:

International (IPC 8-9): B60K17/06 B60L11/14 B60L15/20 F01B7/08

F01B7/16 F01B9/04 F01C9/00 F01D15/10 F02B53/00 F02B55/00 F02B63/04 F02B75/00 F02B75/02 F02B75/40 F02C6/00 F03B11/00 F03B11/02 F03B13/00 F03B13/10 F03B13/22 F03B13/26 F03B15/00 F03B15/02 F03B15/08 F03B15/12 F03B15/16 F03B17/06 F03B3/00 F03B3/18 F03B7/00 F03D1/00 F03D11/00 F03D11/02 F03D15/00 F03D17/00 F03D3/00 F03D3/04 F03D7/00 F03D7/02 F03D7/04 F03D9/00 F03D9/25 F16H1/32 F16H1/36 F16H1/46 F16H15/50 F16H25/04 F16H25/14 F16H29/04 F16H3/00 F16H3/44 F16H3/46 F16H3/48 F16H3/52 F16H3/56 F16H3/62 F16H3/66 F16H3/70 F16H3/72 F16H3/74 F16H3/76 F16H3/78 F16H3/78 F16H3/78 F16H57/08 H02K21/24 H02K7/10 H02K7/116 H02K7/18 H02P9/02 H02P9/04 H02P9/42 (Advanced/Invention);

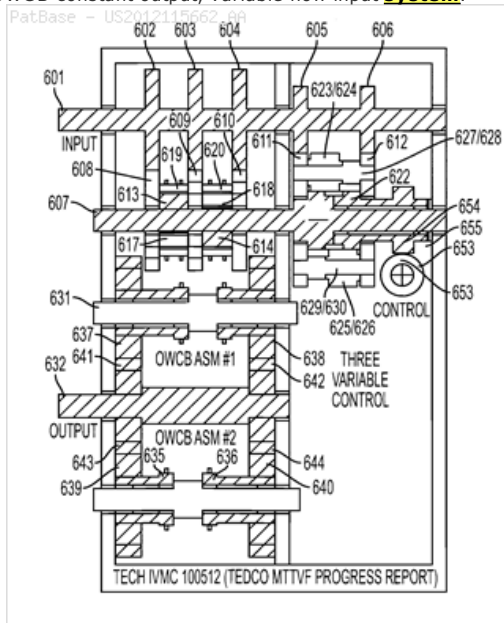
F16H15/50 F16H29/04 F16H48/06 H02P1/04 (Advanced/Non-invention)

CPC: F05B2260/4031 F05B2270/1041 F05B2270/327 Y02E10/723 F03D7/02 F16H3/56 H02P2101/15 Y10T74/19149 F03B15/02 F16H3/62 F16H3/52 F16H15/50 F16H25/04 F05B2240/11 F05B2240/133 F05B2240/40 Y10T74/18296 Y10T74/18792 F03B3/18 H02P9/04 H02P9/42 H02P9/02 F01B7/08 F01B7/16 F01B9/047 F01C19/005 F02B75/40 F02B2075/023 F16H29/04 F03D80/00 F03D9/10 H02P9/48 Y02T10/17 Y02E10/226 F01C9/002 F16H3/666 F16H3/48 F16H3/72 B60L11/14 B60L15/2054 B60L2210/30 B60L2210/40 B60L2220/14 B60L2240/421 B60L2240/423 B60L2240/425 B60L2240/486 F03B17/06 F03D15/00 Y02E10/725 Y02T10/645 Y02T10/648 Y02T10/70 Y02T10/7077 Y02T10/7241 Y02T10/7275 Y02E10/72 H02K7/183 F05B2210/11 F05B2210/12 F05B2220/32 H02K7/116 Y02E10/38 F03B17/063 F03B15/08 F05B2240/93 F05B2240/97 Y02E10/28 F03B13/264 F03B15/12 F05B2210/16 F05B2260/40311 F05B2260/404 F05B2270/101 F05B2270/32 Y02E10/74 Y10T74/18056 Y10T74/2101 F05B2260/402 Y02E10/223 Y02E10/722 F03D3/002 F03D3/0436 F03D7/0272 F03D9/25 F05B2220/7062 H02K1/2753 H02K11/21 H02K19/18

European: F03B15/08 F03B3/18 F03D11/00 F03D11/02 F03D7/00 F03D9/02 H02P9/04 H02P9/48 R05B260/402

R05B260/4031 R05B270/1041 R05B270/327 T02P9/00A3 Y02E10/72 Y02E10/72D Y02E10/72F

US: 1/1 180/364 180/368 290/1C 290/43 290/52 290/53 290/54 322/29 415/124.1 415/147 415/60 416/9 475/170 475/172 475/173 475/175 475/199 475/201 475/204 475/205 475/206 475/248 475/269 475/277 475/288 475/302 475/31 475/311 475/31P 475/323 475/331 475/59 74/25 74/55 74/567 74/730.1 74/730.100S 74/89.14



Family:

Publication number	Publication date	Application number	Application date
CN105247189 A	20160113	CN201480029108	20140422
CN105264220 A	20160120	CN201480031843	20140425
CN105264220 B	20180323	CN201480031843	20140425
EP3008330 A1	20160420	EP20140810755	20140425
EP3008330 A4	20170816	EP20140810755	20140425
IN11442DN2015 A	20160429	IN2015DN11442	20151215
JP2016529431 T2	20160923	JP20160519502T	20140425
JP6260805 B2	20180117	JP20160519502T	20140425
KR20160009043 A	20160125	KR20157035202	20140422
KR20160017086 A	20160215	KR20167000606	20140425
US2012115662 AA	20120510	US20100384621	20100720
US2012243991 AA	20120927	US20120425501	20120321
US2012299301 AA	20121129	US20120568288	20120807
US2013274056 AA	20131017	US20130915785	20130612
US2014094338 AA	20140403	US20130096171	20131204
US2014137676 AA	20140522	US20140155404	20140115
US2014141927 AA	20140522	US20140155401	20140115
US2014241855 AA	20140828	US20140255377	20140417
US2015204421 AA	20150723	US20150668315	20150325
US2015357951 AA	20151210	US20150829354	20150818
US2016010620 AA	20160114	US20150838867	20150828
US2016169353 AA	20160616	US20160011772	20160201
US2017030326 AA	20170202	US20160267655	20160916
US2018038340 AA	20180208	US20170707138	20170918
US8388481 BB	20130305	US20100384621	20100720
US8485933 BB	20130716	US20120568288	20120807
US8641570 BB	20140204	US20120425501	20120321
US8702552 BB	20140422	US20130915785	20130612
US8986149 BB	20150324	US20140155401	20140115
US8992370 BB	20150331	US20140155404	20140115
US9017208 BB	20150428	US20130096171	20131204
US9151269 BB	20151006	US20140255377	20140417
US9303733 BB	20160405	US20150668315	20150325
US9476401 BB	20161025	US20150838867	20150828

US9490736 BB	20161108	US20150829354	20150818
US9506534 BB	20161129	US20160011772	20160201
US9912209 BB	20180306	US20160267655	20160916
WO11011358 A2	20110127	WO2010US42519	20100720
WO11011358 A3	20110428	WO2010US42519	20100720
WO14200622 A1	20141218	WO2014US35487	20140425
WO15160623 A1	20151022	WO2015US25121	20150409

Priority:

US20090226943P	20090720	US20100384621	20100720	US20120384621	20120118
US20110466056P	20110322	US20110521408P	20110809	US20110523846P	20110816
US20120425501	20120321	US20120568288	20120807	US20130915785	20130612
US20130096171	20131204	US20140155401	20140115	US20130805584P	20130327
US20130825560P	20130521	US20140039096P	20140819	WO2010US42519	20100720
US20140155404	20140115	US20140255377	20140417	US20150668315	20150325
US20140225658	20140326	WO2014US34859	20140422	WO2014US35487	20140425
US20150829354	20150818	US20150838867	20150828	US20160011772	20160201
US20160267655	20160916	US20170707138	20170918	US20160409549P	20161018
WO2010US02519	20100720				

Probable Assignee: DIFFERENTIAL DYNAMICS CORP

Assignee(s): (std): DIFFERENTIAL DYNAMICS CORP ; HAN KYUNG SOO

Assignee(s): BERKELEY ALFRED R III

Inventor(s): (std): HAN KYUNG SOO

Agent(s): SUCKLING ANDREW MICHAEL; CAMERON LLP; JACKSON THOMAS H; JACKSON THOMAS

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 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

Title: MULTIPLE INDUCTION ELECTRIC **MOTOR** AND VEHICLE

Abstract: Source: US2012186888A [EN] A novel multiple induction electric **motor** and vehicle that stores electrical power; provides a first and second direct current power input from the stored electrical power; separately produces first and second synchronized variable frequency **alternating current** control signal from the first and second direct current power inputs, respectively; produces first and second synchronized rotating magnetic **fields** responsive to the first and second variable frequency **alternating current** control signals, respectively; induces a first induced magnetic **field** around a conductor in a first inductive rotor responsive to the first rotating magnetic **field**; induces a second induced magnetic **field** around a conductor in a second inductive rotor responsive to the second rotating magnetic **field**; applies first and second rotational forces between the first and second rotating magnetic **fields** and the first and second induced magnetic **fields** to the shaft; and transmits the first and second rotational forces to a drive wheel.

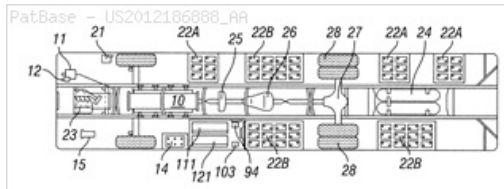
Classifications:

International (IPC 8-9): B60K1/00 B60K1/02 B60K1/04 B60K15/07 B60L1/00 B60L11/02 B60L11/06 B60L11/12 B60L11/18 B60L3/00 B60W10/08 H02K16/02 H02K16/04 H02P27/00 H02P27/04 H02P5/69 H02P6/04 H02P6/08 H02P9/02 (Advanced/Invention); B60K1/00 B60K15/063 (Advanced/Non-invention); B60L11/06 H02P6/08 (Core/Non-invention); B60K (Subclass/Invention)

CPC: H02P5/69 H02P27/00 Y02T10/70 Y10S903/906 B60K1/00 B60K1/02 B60K1/04 B60K15/07 B60K2001/0438 B60K2015/0638 B60L1/003 B60L3/0023 B60L3/0046 B60L3/0092 B60L11/123 B60L11/1877 B60L2210/20 B60L2220/20 B60L2230/22 B60L2230/24 B60L2240/36 B60L2250/16 B60L2270/145 B60Y2200/143 B60Y2200/91 H02K16/02 H02P6/04 H02P27/04 Y02T10/6217 Y02T10/641 Y02T10/642 Y02T10/7005 Y02T10/705 Y02T10/7077 Y02T10/725 Y02T90/12 H02P9/02 B60L2200/26 Y02T10/7088

European: B60K1/02 B60K1/04 B60K15/07 B60L1/00B B60L11/12D B60L11/18M36 B60L3/00F B60L3/00F6 B60L3/00R B60L8/00 B60L8/00B B60L8/00D L60K1/00 L60K1/04A11 L60K15/063M L60L210/20 L60L220/20 L60L230/22 L60L230/24 L60L240/36 L60L250/16 L60L270/14D L60Y200/143 L60Y200/91 Y02T10/62F2 Y02T10/70 Y02T10/70B Y02T10/70H4 Y02T10/70J2 Y02T10/70J2B Y02T10/72B6

US: 180/65.285 180/65.31 180/65.310P 180/65.6 180/65.600S 290/45 290/7 310/114 318/45 318/807 318/807S 318/808 903/906



Family:

Publication number	Publication date	Application number	Application date
CA2775497 AA	20110303	CA20102775497	20100827
CA2775497 C	20140506	CA20102775497	20100827
CN102596609 A	20120718	CN201080049129	20100827
CN102596609 B	20151007	CN201080049129	20100827
EP2473364 A1	20120711	EP20100812640	20100827
EP2473364 A4	20140402	EP20100812640	20100827
HK1173419 A1	20160909	HK20130100528	20130111
MX2012002538 A1	20120717	MX20120002538	20100827
TW201115902 A	20110501	TW20100129284	20100831
TWI435531 B	20140421	TW20100129284	20100831
US2012186888 AA	20120726	US20100394206	20100827
US2014103658 AA	20140417	US20130046727	20131004
US2015155801 AA	20150604	US20150616796	20150209
US8550196 BB	20131008	US20100394206	20100827
US8950529 BB	20150210	US20130046727	20131004
US9906172 BB	20180227	US20150616796	20150209
WO11025918 A1	20110303	WO2010US46913	20100827

Priority:

US20090238495P 20090831 US20100394206 20100827 US20130046727 20131004
 WO2010US46913 20100807 US20150616796 20150209 US20120394206 20120305
 WO2010US46913 20100827

Probable Assignee: MULTIPLE ELECTRIC SYSTEMS LLC

Assignee(s): (std): MULTIPLE ELECTRIC SYSTEMS L L C ; MULTIPLE ELECTRIC SYSTEMS LLC ; NEW CORE INC ; ROSS ROBERT

Inventor(s): (std): ROBERT ROSS ; ROSS ROBERT

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; AKERS NOEL JAMES; ROYLANCE ABRAMS BERDO AND GOODMAN LLP; MORRIS AND KAMLAY LLP; JEFFERSON IP LAW LLP; SAUNDERS JASON A 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 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 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

Title: BIDIRECTIONAL DRILL STRING TELEMETRY FOR MEASURING AND DRILLING CONTROL

Abstract: Source: US2007029112A [EN] The disclosure has application for use in conjunction with an operation of drilling an earth borehole using: a drilling rig, a drill string having its generally upper end mechanically coupleable with and suspendable from the drilling rig, and a bottom hole assembly adjacent the lower end of the drill string, the bottom hole assembly including a drill bit at its lower end. A method is set forth for obtaining information about at least one parameter sensed at the bottom hole assembly, including the following steps: providing at least one measuring **device** in the bottom hole assembly, the at least one measuring **device** producing measurement data representative of a measured condition at the bottom hole assembly; providing an uphole processor **system** at the earth's surface; providing a drill string telemetry **system** coupled with the at least one measuring **device** and coupled with the uphole processor **system**; and transmitting the data from the measuring **device** to the uphole processor **system** via the drill string telemetry **system**.

Classifications:

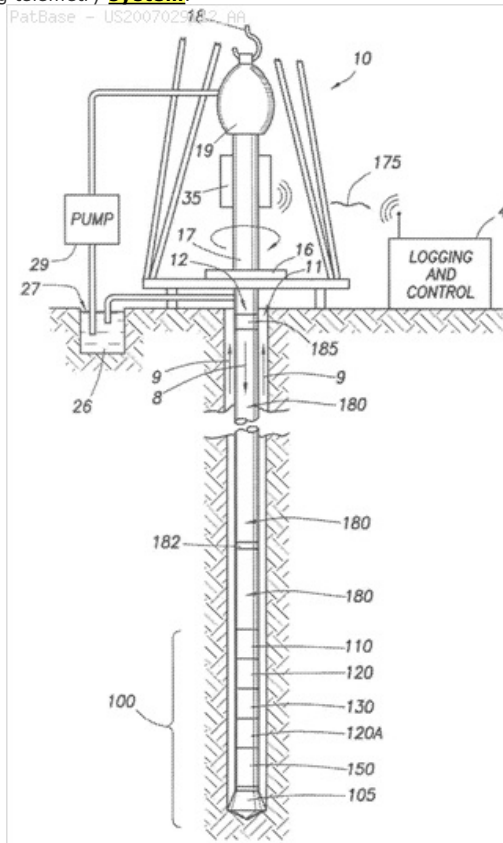
International (IPC 8-9): E21B17/00 E21B17/02 E21B19/16 E21B3/02 E21B34/04 E21B34/16 E21B41/00 E21B43/00 E21B43/04 E21B43/08 E21B43/10 E21B43/12 E21B43/14 E21B44/00 E21B47/00 E21B47/01 E21B47/02 E21B47/04 E21B47/06 E21B47/10 E21B47/12 E21B47/13 E21B47/16 E21B49/00 G01D11/24 G01F1/00 G01V3/00 G01V3/18 G01V3/28 G01V9/00 G06F19/00 G08C17/04 H01B11/00 H02J7/00 H02P9/04 H04H1/10 H04H20/82 (Advanced/Invention); E21B17/02 (Advanced/Non-invention); E21B17/00 E21B17/02 E21B19/00 E21B41/00 E21B43/00 E21B43/02 E21B43/12 E21B44/00 E21B47/00 E21B47/02 E21B47/04 E21B47/06 E21B47/10 E21B47/12 E21B49/00 G01V3/00 G01V3/18 G06F19/00 H01B11/00 H02J7/00 H02P9/04 H04H1/02 (Core/Invention)

International (IPC 1-7): E21B17/00 E21B17/02 E21B43/00 E21B43/04

CPC: E21B43/04 E21B49/00 G01V11/002 E21B17/07 E21B47/0006 E21B47/1005 G01F1/684 Y10T29/49007 E21B17/003 E21B47/00 E21B47/122 E21B47/12 E21B43/08 E21B17/028 E21B43/14 E21B41/0035

European: E21B17/00K E21B17/02E E21B17/07 E21B43/04 E21B43/08 E21B43/14 E21B47/00 E21B47/00K E21B47/01 E21B47/10B E21B47/12 E21B47/12M E21B49/00 G01V11/00B

US: 1/1 166/105 166/242.6 166/242.7 166/250.01 166/250.010S 166/250.03 166/250.11 166/263 166/65.1 166/66 175/24 175/26 175/26P 175/40 175/40P 175/45 175/45S 175/50 310/155 310/96 320/108 322/14 340/853.1 340/853.100S 340/853.2 340/853.200P 340/854.4 340/854.8 340/854.800P 340/854.800S 340/854.9 340/855.1 340/855.8 367/82 702/12 702/12P 702/45 702/6 702/6P 73/152.18 73/431 73/431P

**Family:**

Publication number	Publication date	Application number	Application date
AT471430 E	20100715	AT20060789382T	20060804
AT471431 E	20100715	AT20060813296T	20060804
AT491859 E	20110115	AT20060789337T	20060803
BRPI0614416 A2	20110329	BR2006PI14416	20060804
BRPI0701350 A	20071127	BR2007PI01350	20070329
BRPI0917639 A2	20161101	BR2009PI17639	20090810
CA2582541 AA	20070930	CA20072582541	20070323
CA2582541 C	20151117	CA20072582541	20070323
CA2616909 AA	20080128	CA20062616909	20060804
CA2616909 C	20120124	CA20062616909	20060804
CA2617062 AA	20080128	CA20062617062	20060804
CA2617062 C	20120320	CA20062617062	20060804
CA2617418 AA	20080130	CA20062617418	20060803
CA2617418 C	20120221	CA20062617418	20060803
CA2757380 AA	20070215	CA20062757380	20060804
CA2757380 C	20140520	CA20062757380	20060804
CN101253304 A	20080827	CN200680029138	20060804
CN101263276 A	20080910	CN200680028741	20060803
CN101263276 B	20111221	CN200680028741	20060803
CN101278102 A	20081001	CN200680028938	20060804
DE602006014972 D1	20100729	DE200660014972T	20060804
DE602006014975 D1	20100729	DE200660014975T	20060804
DE602006018947 D1	20110127	DE200660018947T	20060803
DK1913228 T3	20100913	DK20060789382T	20060804
EA012821 B1	20091230	EA20070000517	20070329
EA2007000517 A1	20071228	EA20070000517	20070329
EG24736 A	20100630	EG20070050258	20070521
EG25129 A	20110918	EG20070030156	20070329
EP1913228 A2	20080423	EP20060789382	20060804
EP1913228 B1	20100616	EP20060789382	20060804
EP1913231 A1	20080423	EP20060789337	20060803

EP1913231 B1	20101215	EP20060789337	20060803
EP1915504 A1	20080430	EP20060813296	20060804
EP1915504 B1	20100616	EP20060813296	20060804
EP2335095 A1	20110622	EP20090810436	20090810
EP2335095 A4	20131120	EP20090810436	20090810
EP2335095 B1	20170503	EP20090810436	20090810
GB200705833 A0	20070502	GB20070005833	20070327
GB200707748 A0	20070530	GB20070007748	20070423
GB200710469 A0	20070711	GB20070010469	20070601
GB200908078 A0	20090624	GB20090008078	20071002
GB2436579 A1	20071003	GB20070005833	20070327
GB2436579 B2	20101229	GB20070005833	20070327
GB2438481 A1	20071128	GB20070007748	20070423
GB2438481 B2	20100331	GB20070007748	20070423
GB2439426 A1	20071227	GB20070010469	20070601
GB2439426 B2	20090603	GB20070010469	20070601
GB2459390 A1	20091028	GB20090008078	20071002
GB2459390 B2	20111214	GB20090008078	20071002
GC2219 A	20121205	GC2007P009353	20071027
GC2247 A	20121231	GC2008P010184	20080218
IN00568CN2008 A	20081128	IN2008CN00568	20080204
IN00570CN2008 A	20081128	IN2008CN00570	20080204
IN00578CN2008 A	20081212	IN2008CN00578	20080204
IN00638CH2007 A	20081128	IN2007CH00638	20070328
IN01077CH2007 A	20081205	IN2007CH01077	20070523
IN277560 B	20161202	IN2008CN00570	20080204
IN278897 B	20170106	IN2007CH01077	20070523
JP2009503306 T2	20090129	JP20080525194T	20060803
JP2009503307 T2	20090129	JP20080525218T	20060804
JP2009503308 T2	20090129	JP20080525227T	20060804
JP5384109 B2	20140108	JP20080525218T	20060804
MX2007003687 A1	20081201	MX20070003687	20070328
MX2007009198 A1	20090108	MX20070009198	20070731
MX2008001175 A1	20080318	MX20080001175	20060804
MY147744 A	20130115	MY20070000488	20070328
NO20071662 A	20071001	NO20070001662	20070329
NO20072070 A	20071001	NO20070002070	20070423
NO20073145 A	20071227	NO20070003145	20070621
NO20073145 L	20071227	NO20070003145	20070621
NO20080298 A	20080304	NO20080000298	20080116
NO20080466 A	20080227	NO20080000466	20080125
NO20080467 A	20080303	NO20080000467	20080125
NO20080467 L	20080303	NO20080000467	20080125
NO20080844 A	20080821	NO20080000844	20080219
NO339693 B1	20170123	NO20080000467	20080125
NO341777 B1	20180115	NO20070003145	20070621
RU2007123575 A	20081227	RU20070123575	20070622
RU2008108082 A	20090910	RU20080108082	20060804
RU2008108088 A	20090910	RU20080108088	20060803
RU2008108100 A	20090910	RU20080108100	20060804
RU2401931 C2	20101020	RU20080108082	20060804
RU2413841 C2	20110310	RU20080108100	20060804
RU2432446 C2	20111027	RU20080108088	20060803
RU2455460 C2	20120710	RU20070123575	20070622
SA3428 B1	20140526	SA20090300536	20090826
SG163604 A1	20100830	SG20100050318	20060804
US2007029112 AA	20070208	US20060498845	20060803
US2007030167 AA	20070208	US20060498847	20060803
US2007295504 AA	20071227	US20070746967	20070510
US2008201080 AA	20080821	US20070768022	20070625
US2009066535 AA	20090312	US20080199246	20080827
US2009151935 AA	20090618	US20080173546	20080715
US2009173493 AA	20090709	US20090401185	20090310
US2010116550 AA	20100513	US20060995027	20060803
US2010271233 AA	20101028	US20100787103	20100525
US2011010096 AA	20110113	US20100833515	20100709
US2011107834 AA	20110512	US20100904401	20101014
US2012013482 AA	20120119	US20110243438	20110923
US2012323494 AA	20121220	US20120450318	20120418
US7775275 BB	20100817	US20070746967	20070510
US7817062 BA	20101019	US20100787103	20100525
US7890273 BB	20110215	US20070768022	20070625
US7913773 BB	20110329	US20060498845	20060803
US8056619 BB	20111115	US20080199246	20080827
US8146658 BB	20120403	US20100904401	20101014
US8195398 BB	20120605	US20100833515	20100709
US9175523 BB	20151103	US20110243438	20110923
US9366092 BB	20160614	US20060995027	20060803
WO07016687 A1	20070208	WO2006US30326	20060803
WO07019292 A2	20070215	WO2006US30404	20060804
WO07019292 A3	20070405	WO2006US30404	20060804

Priority:

CA20062616909	20060804	CA20062757380	20060804	US20050705326	20050804
US20050705326P	20050804	CA20072582541	20070323	CA20112616909	20111121
US20060498845	20060803	US20060498847	20060803	US20060745986P	20060523
US20060747986	20060523	US20060787592	20060330	US20050708561P	20050816
US20060745469P	20060424	US20060747986P	20060523	US20060995027	20060803
US20070013542P	20071213	US20070767908	20070625	US20070768022	20070625
US20080173546	20080715	US20070860630P	20070220	US20070735521	20070416
US20060787592P	20060330	US20060805691P	20060623	US20060865084P	20061109
US20060866622P	20061121	US20060867276P	20061127	US20070890630P	20070220
US20070688089	20070319	US20070746967	20070510	US20070890630P	20070319
US20100787103	20100525	WO2006US30460	20060804	WO2006US30404	20060804
US20090401185	20090310	US20080199246	20080827	WO2007US80185	20071002
US20100833515	20100709	US20090224547P	20090710	US20100904401	20101014
WO2009US53286	20090810	US20110243438	20110923	WO2006US30326	20060803
US20120450318	20120418				

Probable Assignee: SCHLUMBERGER TECHNOLOGY CORP

Assignee(s): (std): CENS FABIEN ; CENS FABIEN F ; DOWNTON GEOFFREY C ; HVATUM LISE ; CLARK BRIAN ; FOLLINI JEAN MARC ; HUTIN REMI ; INTELLISERV LLC ; HOWARD PETE ; INTELLISERV INTERNEHSHNL K HOLDING LTD ; INTELLISERV INT HOLDING LTD ; MEHTA SHYAM B ; LI QIMING ; PRAD RES AND DEV NV ; MADHAVAN RAGHU ; LEBLANC RANDALL P ; MONTERO JOSEPH ; MADHAVAN MAGHU ; REED CHRISTOPHER P ; SCHLUMBERGER CA LTD ; SCHLUMBERGER HOLDINGS ; SANTOSO DAVID ; SCHLUMBERGER TECHNOLOGY BV ; SCHLUMBERGER SERVICES PETROL ; THOMAS JOHN A ; SHERMAN MARK ; SCHLUMBERGER TECHNOLOGY CORP ; REED CHRITOPHER P ; VENERUSO ANTHONY F ; ROSS DONALD W ; SCHLUMBERGER TECHNOLOGY BV ; VENERUSO ANTHONY ; PRAD RES AND DEV LTD ; MCKAY IAN S ; PATEL DINESH R ; LOVELL JOHN R ; PAUCHET FREDERIC ; MACKAY IAN STUART ; ALDRED WALTER D ; ARACHMAN FITRAH ; PATEL DINESH ; SERVICES PETROLIERS SCHLUMBERGER ; VENERUSO ANTHONY FRANK

Assignee(s): SCHLUMBERGER CANADA LTD ; SCHLUMBERGER HOLDINGS LTD ; PRAD R AND D LTD ; BEAULIEU JEAN PHILIPPE ; PRAD RESEARCH AND DEVELOPMENT N V WILLEMSSTAD ; PRAD RESEARCH AND DEVELOPMENT N V WILLEMSTAD ; SHLJUMBERGER TEKNOLODZHI BV ; SCHLNMBERGER HOLDINGS LTD ; PRAD RESEARCH AND DEVELOPMENT NV ; PRAD RESEARCH AND DEVELOPMENT LTD ; CHOUZENOUX CHRISTIAN ; PRAD RESEARCH AND DEVELOPMENT N V

Inventor(s): (std): LEBLAN REHNDALL P ; LI TSIMIN ; MADKHAVAN RAGKHU ; MONTERO DZHOZEZ ; SANTOSO DEHVID ; TOMAS DZHON A ; VENERUSO ANTHONY FRANK ; VENERUSO ANTHONY F ; VENERUSO ANTHONY ; THOMAS JOHN A ; THOMAS JOHN ; SHERMAN MARK ; SANTOSO DAVID ; ROSS DONALD W ; ROSS DONALD R ; PAUCHET FREDERIC ; PATEL DINESH R ; PATEL DINESH ; MONTERO JOSEPH ; MEKHTA SHIJAM B ; MEHTA SHYAM B ; MEHTA SHYAM ; MCKAY IAN S ; MARK SHERMAN ; MADHAVAN RAGHU ; MADHAVAN MAGHU ; MACKAY STUART ; MACKAY IAN STUART ; LOVELL JOHN R ; LOVELL JOHN ; LISE HVATUM ; LI QIMING ; LEBLANC RANDALL P ; LEBLANC RANDALL ; KLARK BRAJAN ; JUTEHN REMI ; JOSEPH MONTERO ; REMI HUTIN ; REED CHRITOPHER P ; REED CHRISTOPHER P ; REED CHRISTOPHER ; RAGHU MADHAVAN ; QIMING LI ; HVATUM LISE ; HUTIN REMI ; HOWARD PETE ; HARRISON STEPHEN ; EHLRED UOLTER D ; DOWNTON GEOFFREY C ; DOWNTON GEOFFREY ; DINESH PATEL ; DAVID SANTOSO ; DAUNTON DZHEFFRI K ; CLARK BRIAN ; CHOUZENOUX CHRISTIAN ; CENS FABIEN F ; CENS FABIEN ; CENS FABIAN F ; BRIAN CLARK ; BEAULIEU JEAN PHILPPE ; BEAULIEU JEAN PHILIPPE ; ARACHMAN FITRAH ; FOLLINI JEAN MARC ; ALDRED WALTER D ; ALDRED WALTER ; RID KRISTOFER P ; KHVATUM LIZ ; JUTEN REMI ; FOLLINI ZHAN MARK

Inventor(s): FOLLINI ZHAN-MARK ; FABIEN F CENS ; FABIEN CENS ; ANTHONY VENERUSO ; ANTHONY FRANK VENERUSO ; ANTHONY F VENERUSO ; CHRISTOPHER P REED ; CHRISTIAN CHOUZENOUX ; DONALD W ROSS ; DONALD R ROSS ; DINESH R PATEL ; GEOFFREY C DOWNTON ; FREDERIC PAUCHET ; PETE HOWARD ; JOHN R LOVELL ; JOHN LOVELL ; JEAN PHILPPE BEAULIEU ; JEAN PHILIPPE BEAULIEU ; JEAN MARC FOLLINI ; IAN S MCKAY ; ROSS DONALD ; STEPHEN HARRISON ; SHYAM B MEHTA ; WALTER D ALDRED

Agent(s): SMART AND BIGGAR ; STOOLE BRIAN DAVID ; BAILEY RICHARD ALAN ; OXLEY ROBIN JOHN GEORGE ; SULEIMAN I AL AMMAR LAW OFFICE ; INO SARI ; KUMAKURA YOSHIO ; KURASAWA ICHIRO ; MATSUSHITA MITSURU ; DESHIMARU TAKESHI ; SHISHIDO KAICHI ; OHTSUKA FUMIAKI ; SCHLUMBERGER OILFIELD SERVICES ; SCHLUMBERGER RESERVOIR COMPLETIONS ; CONLEY ROSE PC ; TROP PRUNER AND HU PC ; BRANDON S ; RODNEY V ; RODNEY ; DAVID J ; DAVE R ; BRIGITTE L ; BRANDON ; TIM ; WRIGHT DARYL R 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 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 PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN ZA ZM ZW

Title: Electronic **device**, electronically controlled mechanical timepiece, and control method therefor

Abstract: Source: US2001030909A [EN] An electronically controlled mechanical timepiece, which is an electronic **device**, is equipped with a generator 2 for converting the mechanical energy transmitted from a mainspring through the intermediary of a train wheel into electrical energy, and a rotation control unit for controlling the rotation cycle of the generator 2. The rotation control unit is equipped with a count-up/down counter 60 that compares a reference signal with a rotation detection signal of the generator 2 thereby to adjust a braking time for the generator 2, and a brake control signal generating circuit 81 that corrects the time set at the count-up/down counter 60 on the basis of the rotation cycle of the generator 2. If the rotation cycle of the generator 2 significantly deviates from a reference signal cycle, then the braking time is adjusted on the basis of the rotation cycle. Therefore, optimum brake control can be conducted, a secure and sufficient brake amount can be provided, and the responsiveness in **speed** control can be enhanced.

Classifications:

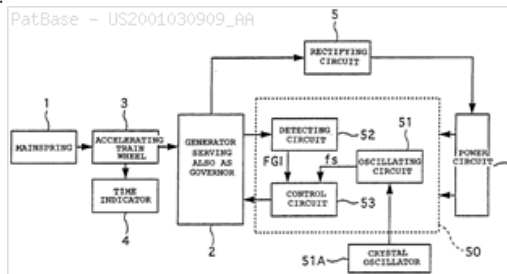
International (IPC 8-9): G04B1/00 G04B17/00 G04C10/00 G04C11/00 G04C3/00 G04C3/14 G04G19/00 G04G99/00 H02M7/12 H02P9/00 H02P9/04 H02P9/06 (Advanced/Invention); G04B1/00 G04B17/00 G04C10/00 G04C11/00 G04C3/00 H02M7/12 H02P9/00 H02P9/04 (Core/Invention); G04C (Subclass/Invention)

International (IPC 1-7): G04B1/00 G04B17/00 G04C10/00 G04C11/00 G04C3/00 G04C3/14 G04C5/00 G04G1/00 H02D9/04 H02H7/06 H02K7/00 H02M7/12 H02P11/00 H02P9/00 H02P9/04 H02P9/06

CPC: G04C3/00 G04C10/00 G04C11/00

European: G04C10/00 G04C11/00 G04C3/00

US: 290/1C 290/1E 310/75A 310/75B 322/24 322/28 322/29 322/8 368/204 368/204P



Family:

Publication number	Publication date	Application number	Application date
CN100399217 C	20080702	CN20001006517	20000302
CN1140855 C	20040303	CN19981020819	19980930
CN1214477 A	19990421	CN19981020819	19980930
CN1267845 A	20000927	CN20001006517	20000302
DE60029859 D1	20060921	DE20006029859	20000303
DE60029859 T2	20070906	DE20006029859T	20000303
DE69835926 D1	20061102	DE19986035926	19980930
DE69835926 T2	20070426	DE19986035926T	19980930
EP0905588 A2	19990331	EP19980307937	19980930
EP0905588 A3	20010131	EP19980307937	19980930
EP0905588 B1	20060920	EP19980307937	19980930
EP1041464 A2	20001004	EP20000301773	20000303
EP1041464 A3	20020522	EP20000301773	20000303
EP1041464 B1	20060809	EP20000301773	20000303
HK1016708 A1	20070404	HK19990101806	19990423
HK1031436 A1	20070119	HK20010102093	20010322
JP2000002777 A2	20000107	JP19980220738	19980804
JP2000046968 A2	20000218	JP19990217117	19990730
JP2000314782 A2	20001114	JP19990343262	19991202
JP2000346964 A2	20001215	JP19990364956	19991222
JP2001337179 A2	20011207	JP20010097569	20010329
JP2001343469 A2	20011214	JP20010097570	20010329
JP3006593 B2	20000207	JP19980220738	19980804
JP3601389 B2	20041215	JP19990364956	19991222
JP3674426 B2	20050720	JP19990343262	19991202
US2001030909 AA	20011018	US20010771486	20010125
US2001046188 AA	20011129	US19980162876	19980929
US6373789 BB	20020416	US19980162876	19980929
US6483276 BA	20021119	US20000518812	20000303
US6795378 BB	20040921	US20010771486	20010125

Priority:

JP19970265205	19970930	JP19980108251	19980417	JP19980220738	19980804
JP19990217117	19980804	JP19990217117	19990730	JP19990364956	19991222
JP19990086949	19990329	JP19990343262	19991202	JP19990055545	19990303
JP20010097570	20010329	JP20010097569	20010329	JP19995554599	19990303
JP19998694999	19990329	US20010771486	20010125	US19980162876	19980929
US20000518812	20000303				

Probable Assignee: SEIKO EPSON CORP

Assignee(s): (std): NAKAMURA HIDENORI ; SEIKO EPSON CORP ; SHIMIZU EISAKU ; TAKAHASHI OSAMU ; SHINKAWA OSAMU

Assignee(s): KOIKE KUNIO

Inventor(s): (std): EISAKU KIYOMIZU ; EISAKU SHIMIZU ; FUJIMORI SHIGEYUKI ; HIDENORI NAKAMURA ; KIYOMIZU EISAKU ; KOIKE KUNIO ; KUNIO KOIKE ; KUNIO OIKE ; NAKAMURA HIDENORI ; OIKE KUNIO ; OSAMU SHINAKAWA ; SHIMIZU EISAKU ; SHINAKAWA OSAMU ; SHINKAWA OSAMU ; TAKAHASHI OSAMU

Inventor(s): OSAMU SHINKAWA ; OSAMU TAKAHASHI ; SHIGEYUKI FUJIMORI

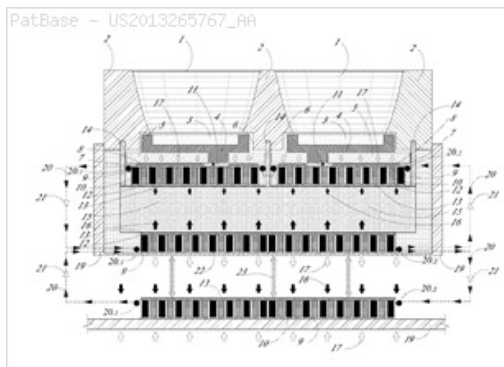
Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: **SYSTEMS**, METHODS AND/OR **DEVICES** FOR PROVIDING LED LIGHTING

Abstract: Source: US2013265767A [EN] A lighting **device** comprising a plurality of LEDs; a plurality of optic **devices** corresponding to the plurality of LEDs; at least one optical separator for substantially preventing the light emitted from one LED from effecting the other LEDs; a thermoelectric **device** configured to harvest heat generated by the LEDs and convert the harvested heat into electrical energy; and a low temperature material for creating a temperature difference across the thermoelectric **device**.

Classifications:

International (IPC 8-9): F21K9/232 F21K9/65 F21K9/68 F21K99/00 F21L4/08 F21S2/00 F21S4/00 F21S9/00 F21V1/00 F21V23/00 F21V29/00 F21V29/503 F21V29/54 F21V7/00 F21V7/04 F21Y101/00 F21Y101/02 F24F12/00 F25B21/02 F28D20/00 G02B5/00 G21H1/10 H01L25/16 H01L33/64 H01L35/00 H01L35/28 H01L35/30 H01L35/32 H01L35/34 H01L37/00 H02N11/00 H05B37/00 H05B37/02 H1L35/30 (Advanced/Invention); F21K99/00 F21Y101/02 F21Y105/00 F21Y107/20 F21Y115/10 F21Y115/15 H01L25/075 H02S10/10 (Advanced/Non-invention); F21S4/00 (Core/Invention); F21V H01L (Subclass/Invention)
International (IPC 1-7): F21S4/00
CPC: F21L4/08 F21K9/232 F21K9/65 F21V7/0083 F21Y2105/00 F21Y2107/20 F21Y2115/10 F21Y2115/15 H01L25/0753 H01L25/167 H01L33/645 H01L2924/0002 F21V29/54 H01L35/32 F21V7/0066 F21K9/68 H01L35/28 H01L2924/00 H01L35/30 F21S4/00 Y02A40/966
US: 136/205 136/207 362/235 362/249.02



Family:

Publication number	Publication date	Application number	Application date
AU2011328964 AA	20120524	AU20110328964	20111116
AU2011328964 BB	20150326	AU20110328964	20111116
AU2011328967 AA	20120524	AU20110328967	20111116
AU2011328967 BB	20150326	AU20110328967	20111116
BR112013012038 A2	20171219	BR20131112038	20111116
CA2817962 AA	20130514	CA20112817962	20111116
CA2817966 AA	20130514	CA20112817966	20111116
CA2856061 AA	20140515	CA20122856061	20121115
CA2856065 AA	20140515	CA20122856065	20121115
CN103348179 A	20131009	CN201180065017	20111116
CN103348500 A	20131009	CN201180065022	20111116
CN103348500 B	20170118	CN201180065022	20111116
CN104170107 A	20141126	CN201280067080	20121115
CN104170107 B	20171003	CN201280067080	20121115
EP2641014 A1	20130925	EP20110842030	20111116
EP2641014 A4	20140702	EP20110842030	20111116
EP2641282 A1	20130925	EP20110841145	20111116
EP2641282 A4	20140702	EP20110841145	20111116
EP2780630 A2	20140924	EP20120849882	20121115
EP2780630 A4	20160831	EP20120849882	20121115
EP2780957 A1	20140924	EP20120868211	20121115
EP2780957 A4	20151007	EP20120868211	20121115
HK1201639 A1	20150904	HK20150102161	20150303
HK1201906 A1	20150911	HK20150102197	20150304
ID201600874 A	20160307	ID2013W0002528	20111116
IN03841CN2013 A	20141121	IN2013CN03841	20130515
IN03844CN2013 A	20141121	IN2013CN03844	20130515
IN04360CN2014 A	20150904	IN2014CN04360	20140612
JP2014502015 T2	20140123	JP20130539966T	20111116
JP2014505453 T2	20140227	JP20130539965T	20111116
KR20140032954 A	20140317	KR20137015415	20111116
KR20140040071 A	20140402	KR20137015438	20111116
KR20140101805 A	20140820	KR20147016381	20121115
MX2013005433 A1	20140327	MX20130005433	20111116
MX2013005446 A1	20140116	MX20130005446	20111116
MX2014005944 A1	20140827	MX20140005944	20121115
MX336744 B	20160129	MX20130005446	20111116
MX344188 B	20161208	MX20140005944	20121115
TH139067 A	20150116	TH20131002558	20111116
TW201334246 A	20130816	TW20120142691	20121115
TW201335540 A	20130901	TW20120142742	20121115
TWI614448 B	20180211	TW20120142742	20121115
TWI614921 B	20180211	TW20120142691	20121115
US2013265767 AA	20131010	US20110885992	20111116
US2013269741 AA	20131017	US20110885975	20111116
US2014313716 AA	20141023	US20120358693	20121115
US2015083180 AA	20150326	US20120358688	20121115
US2017211796 AA	20170727	US20160379032	20161214
US9553248 BB	20170124	US20110885992	20111116
US9711705 BB	20170718	US20110885975	20111116
US9739430 BB	20170822	US20120358693	20121115
WO12068218 A1	20120524	WO2011US60937	20111116
WO12068221 A1	20120524	WO2011US60942	20111116

WO13074729 A2	20130523	WO2012US65174	20121115
WO13074729 A3	20150611	WO2012US65174	20121115
WO13119287 A1	20130815	WO2012US65170	20121115

Priority:

US20100413995P 20101116	US20110531204P 20110906	US20110532104P 20110908
US20110885992 20111116	US20110885975 20111116	US20120358688 20121115
US20120647863P 20120516	US20120648034P 20120516	WO2011US60937 20111116
WO2011US60942 20111116	WO2012US65170 20121115	US20120358693 20121115
US20160379032 20161214	US20130885992 20130621	WO2012US65174 20121115

Probable Assignee: PHOTON HOLDING LLC

Assignee(s): (std): ELETRON HOLDING LLC ; LANG DANIEL ; LANG DANIEL STEWART ; PHOTON HOLDING LLC ; ELECTRON HOLDING LLC

Assignee(s): ELECTRON HOLDING LLC5969 MCLEOD DRIVELAS VEGASNV81920US ; PHOTON HOLDING LLC9060 W. CHEYENNE AVENUESOLOMON DWIGGINS & FREER LTD.LAS VEGASNV89129US

Inventor(s): (std): DANIEL STEWART LANG ; PHOTON HOLDING LLC ; LANG DANIEL STEWART

Inventor(s): LANG DANIEL STEWARTUS

Agent(s): GRIFFITH HACK; OSLER HOSKIN AND HARCOURT LLP; HOLZWARTH ROCHFORD ANDREAS; HARAKENZO WORLD PATENT AND TRADEMARK; JONES DAY; PAULSON MARK G ET AL; INSOGNA ANTHONY M ET AL; POISSANT BRIAN M 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 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

Title: MEGA COMMUNICATION AND MEDIA **APPARATUS** CONFIGURED TO PROVIDE FASTER DATA TRANSMISSION **SPEED** AND TO GENERATE ELECTRICAL ENERGY

Abstract: Source: US2012032876A [EN] Disclosed embodiments comprise communication **apparatus** operatively configured with CMOS multiple antennas disposed on a chip for boosting communication signals to and for enabling faster data transmission **speed** and to provide interactive user interface. The communication **apparatus** is further configured to convert sound waves, vibrations, **solar** energy, wind force and pressure force into electrical energy communicable to a battery cell. Disclosed embodiment encompasses three modes of communications-the Cell phone, wireless Internet applications, and Global communication and media information. Embodiments provide communication **apparatus** operable to enhance mobile communication efficiency with touch sensitive display and provide energy harvesting platform on at least the housing for the **apparatus** and/or the circuit board configured with memories, processors, and modules. Embodiments provide advanced computing and media applications, including in-vehicle interactive communications and wireless Internet applications. Embodiments further provide a gaming **device**, a wireless media **device** configured with touch pads comprising sensors being embedded in silicon substrate and fused in micro fiber material having excellent electrical characteristics. Certain embodiments provide communication **apparatus** configured for voice enabled applications comprising human voice auditory operable to convert text into voice auditory and/or voice auditory into text applications.

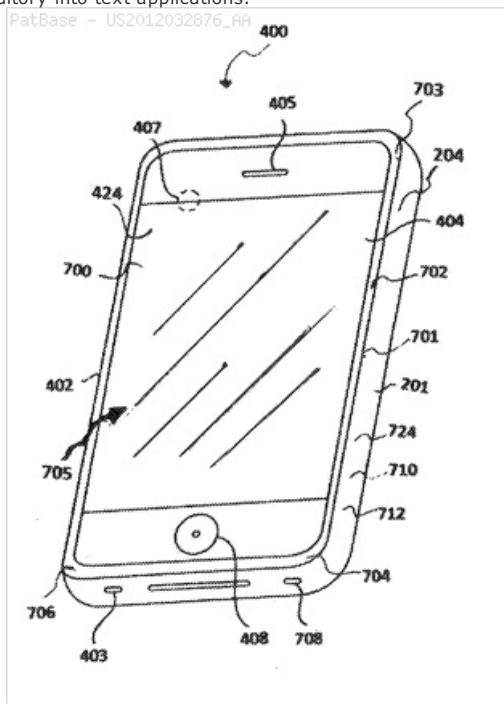
Classifications:

International (IPC 8-9): G09G5/00 H01Q1/22 H01Q1/24 H01Q11/12 H01Q21/28 H04B1/3827 H04M1/00 H04M1/02 H04M1/60 H04M1/725 H04W52/04 H04W88/02 (Advanced/Invention); H04B1/3827 H04W88/02 (Advanced/Non-invention)

CPC: H01Q1/2283 H01Q1/243 H01Q1/245 H01Q21/28 H04W88/02 H04M1/0202 H04B1/3838 H04M1/00 H04M1/0214 H04M1/0235 H04M1/6083 H04M1/72522 H04M1/72536 H04M1/72558 H04M2250/10 H04M2250/12 H04M2250/22 H04W52/04 Y02D70/00 Y02D70/1224 Y02D70/1242 Y02D70/142 Y02D70/144 Y02D70/146 Y02D70/164 Y02D70/166 Y02D70/168 Y02D70/23 Y02D70/26 Y02D70/40 Y02D70/1262

European: H04B1/38P2E H04M1/02A H04M1/60T2C2 H04M1/725F1 T04B1/38P2E T04M1/02A2B4 T04M1/02A2B8 T04M1/725F1E T04M1/725F1P T04M250/10 T04M250/12 T04M250/22 T04W88/02

US: 1/1 345/156 345/156P 455/127.1 455/127.100S 455/550.1 455/550.100S 455/566 455/566P 455/571 455/571S 455/572 455/572S



Family:

Publication number	Publication date	Application number	Application date
US2012032876 AA	20120209	US20100910833	20101024
US2012034954 AA	20120209	US20100852481	20100807
US9130651 BB	20150908	US20100910833	20101024
US9237211 BB	20160112	US20100852481	20100807

Priority:

US20100852481 20100807 US20100910833 20101024

Probable Assignee:

TABE JOSEPH AKWO

Assignee(s): (std):

TABE JOSEPH AKWO

Inventor(s): (std):

TABE JOSEPH AKWO

Agent(s):

JOSEPH

Title: SENSOR ASSEMBLIES

Abstract: Source: US2006025897A [EN] Sensor assembly capable of obtaining and providing a measurement of a physical quantity, e.g., measurement of temperature and/or pressure of a vehicular tire, includes an antenna capable of receiving a radio frequency signal, a radio frequency identification (RFID) **device** coupled to the antenna, a sensor coupled to the RFID **device** arranged to generate a measurement of the physical quantity or quantities, and a switch coupled to the RFID **device** and arranged to connect or disconnect the sensor from a circuit with the antenna dependent on whether the antenna receives a particular signal associated with the RFID **device**. When the antenna receives the particular signal associated with the RFID **device**, the RFID **device** causes the switch to close and connect the sensor in the circuit with the antenna to enable the measurement generated by the sensor to be directed to and transmitted by the antenna.

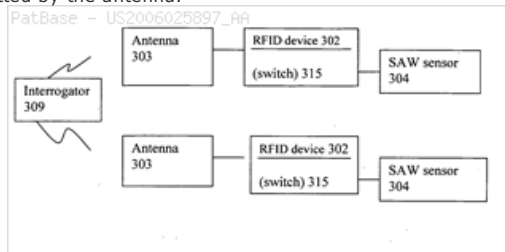
Classifications:

International (IPC 8-9): G06F17/00 G06F7/00 (Advanced/Invention); G06F17/00 (Core/Invention)

CPC: B60C23/005 B60C23/0408 B60C23/20 B60R21/013 B60R2021/01088 B60R2021/01184 G06K19/0717 G08G1/017 G08G1/164

European: B60C23/00D B60C23/04C B60C23/20 B60R21/013 G06K19/07E2 G08G1/017 G08G1/16B L60R21/01L6A L60R21/01N3

US: 701/1 701/1P 701/29.6 701/32 701/33 701/34.3 701/36 701/37 701/37S

**Family:**

Publication number	Publication date	Application number	Application date
US2006025897 AA	20060202	US20050208869	20050822
US7089099 BB	20060808	US20050208869	20050822

Priority:

US20040592838P 20040730 US20050120065 20050502 US20050208869 20050822

Probable Assignee: AMERICAN VEHICULAR SCIENCES LLC

Assignee(s): (std): BREED DAVID S ; SHOSTAK OLEKSANDR T ; KOLOMEYKO ANATOLIY V ; DUVALL WILBUR E ; JOHNSON WENDELL C ; AUTOMOTIVE TECH INT

Assignee(s): AUTOMOTIVE TECHNOLOGIES INT INC ; AUTOMOTIVE TECHNOLOGIES INTERNATIONAL INC ; AMERICAN VEHICULAR SCIENCES LLC

Inventor(s): (std): SHOSTAK OLEKSANDR T ; KOLOMEYKO ANATOLIY V ; JOHNSON WENDELL C ; DUVALL WILBUR E ; BREED DAVID S

Inventor(s): BREED DAVID ; DUVALL WILBUR ; JOHNSON WENDELL ; KOLOMEYKO ANATOLIY ; SHOSTAK OLEKSANDR

Agent(s): BRIAN ROFFE ESQ; BRIAN

Title: AUTOMOTIVE ELECTRONIC SAFETY NETWORK

Abstract: Source: US2001015548A [EN] An occupant protection **device** deployment **system** and safety network including at least one module housing, at least one deployable component such as an airbag associated with each housing, a deployment initiator associated with each housing for initiating deployment of the component, a determination unit for determining that deployment of one or more of the components is desired, and respective electronic control units arranged within, adjacent or proximate each housing and coupled to a respective deployment initiator and the determination unit via an electrical bus for causing the deployment initiator to deploy the component in the respective housing upon receiving a signal from the determination unit. The control units include a power supply for enabling operation of the initiator.

Classifications:

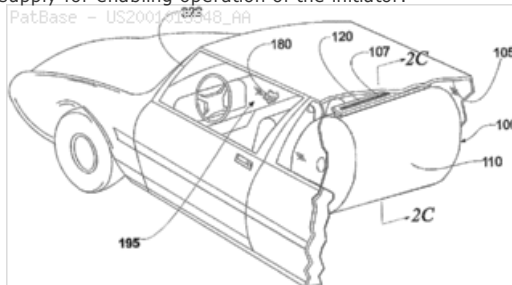
International (IPC 8-9): B60N2/02 B60N2/28 B60R21/16 B60R21/20 B60R21/213 B60R21/231 B60R21/233 B60R21/235 B60R21/30 G06F7/00 G07C5/00 G07C5/08 (Advanced/Invention); B60R21/00 (Advanced/Non-invention)

International (IPC 1-7): B60R21/32

CPC: B60C23/0408 G07C5/085 B60N2002/0272 B60R21/233 B60N2/0232 B60N2/0276 B60N2/2863 B60R21/20 B60R21/214 B60R21/232 B60R21/235 B60R21/30 B60R2021/0004 B60R2021/23107 B60R2021/23153 B60R2021/23161 B60R2021/23169 B60R2021/23519 B60R2021/23523 B60R2021/23557 B60R2021/2358 B60R2021/2359 G07C5/008 G07C5/0808

European: B60C23/04C B60N2/02B4 B60N2/02B6W B60N2/28P4 B60R21/16B2B B60R21/16B2V B60R21/16B4 B60R21/20 B60R21/20K B60R21/214 B60R21/232 B60R21/233 B60R21/235 B60R21/30 G07C5/00T G07C5/08D G07C5/08R2 L60R21/00A1 L60R21/214 L60R21/231C L60R21/231M L60R21/231N L60R21/231P L60R21/235M3 L60R21/235M5 L60R21/235P6 L60R21/235S4 L60R21/235S6

US: 180/274 180/282 280/735 280/735P 701/29 701/29.1 701/32.9 701/33 701/33.6 701/33.7 701/34 701/34.3 701/34.4 701/45 702/183 706/15



Family:

Publication number	Publication date	Application number	Application date
US2001015548 AA	20010823	US20010767020	20010123
US2002027346 AA	20020307	US20010925062	20010808
US6533316 BB	20030318	US20010767020	20010123
US6733036 BB	20040511	US20010925062	20010808
US7103460 BA	20060905	US20050220139	20050906

Priority:

US19940239977	19940509	US19950476077	19950607	US19950550217	19951030
US19980137918	19980820	US19970947661	19971009	US19980073403	19980506
US19950571247	19951212	US19970819609	19970317	US19960028046P	19961009
US20010753186	20010102	US20020043557	20020111	US20010925062	20010808
US20010767020	20010123	US19990356314	19990716	US20010765558	20010119
US20000645709	20000824	US20010304013P	20010709	US20010291511P	20010516
US20010269415P	20010216	US20000231378P	20000908	US19990170973P	19991215
US20050220139	20050906	US20050120065	20050502	US20050082739	20050317
US20050039129	20050119	US20030701361	20031104	US20030642028	20030815
US20030638743	20030811	US20030613453	20030703	US20020330938	20021227
US20020188673	20020703	US20020174709	20020619	US20020079065	20020219
US20030658750	20030909	US20040592838P	20040730	US20030461648P	20030408
US20020423613P	20021104	US20020415862P	20021003		

Probable Assignee: AMERICAN VEHICULAR SCIENCES LLC

Assignee(s): (std): AUTOMOTIVE TECH INT ; SANDERS WILLIAM THOMAS

Assignee(s): BREED DAVID S ; DUVALL WILBUR E ; JOHNSON WENDELL C ; DUVALL WILBUR E ; AUTOMOTIVE TECHNOLOGIES INT ; AUTOMOTIVE TECHNOLOGIES INT INC ; AUTOMOTIVE TECHNOLOGIES INTERNATIONAL INC ; AUTOMOTIVE TECHNOLOGIES INTIONAL ; AMERICAN VEHICULAR SCIENCES LLC

Inventor(s): (std): BREED DAVID S ; DU VALL WILBUR E ; DUVALL WILBUR E ; JOHNSON WENDELL C ; SANDERS WILLIAM THOMAS ; DUVALL WILBUR E

Agent(s): BRIAN

Title: **SYSTEM** FOR OBTAINING VEHICULAR INFORMATION

Abstract: Source: US2005273218A [EN] **System** for obtaining information about a vehicle or a component therein includes sensors arranged to generate and transmit a signal upon receipt and detection of a radio frequency (RF) signal and a multi-element, switchable directional antenna array. Each antenna element is directed toward a respective sensor and transmitter RF signals toward that sensor and receive return signals therefrom. A control mechanism controls transmission of the RF signals from the antenna elements, e.g., causes the antenna elements to be alternately switched on in order to sequentially transmit the RF signals and receive the return signals from the sensors or cause the antenna elements to transmit the RF signals simultaneously and space the return signals from the sensors via a delay line in circuitry from each antenna element such that each return signal is spaced in time in a known manner without requiring switching of the antenna elements.

Classifications:

International (IPC 8-9): G01M17/00 G05D1/00
G06F7/00 (Advanced/Invention)

International (IPC 1-7): G05D1/00 G06F7/00

CPC: B60N2002/0272 G07C5/008 B60C11/24 B60C11/246
B60C19/00 B60C23/0449 B60N2/0232 B60N2/0276 B60N2/2863
B60R21/20 B60R21/213 B60R21/232 B60R21/233 B60R21/235
B60R21/30 B60R2021/0004 B60R2021/23107 B60R2021/23153
B60R2021/23161 B60R2021/23169 B60R2021/23519
B60R2021/23523 B60R2021/23557 B60R2021/2358 B60R2021/2359
G02B27/01 G02B2027/014 G02B2027/0187 G06K7/10178
G07C5/0808 G07C5/085

European: B60C11/24 B60C19/00 B60C23/04C6D2B B60N2/02B4
B60N2/02B6W B60N2/28P4 B60R21/20 B60R21/213 B60R21/232
B60R21/233 B60R21/235 B60R21/30 G02B27/01 G06K7/10A3C
G07C5/00T G07C5/08D G07C5/08R2 L60R21/00A1 L60R21/231C
L60R21/231M L60R21/231N L60R21/231P L60R21/235M3
L60R21/235M5 L60R21/235P6 L60R21/235S4 L60R21/235S6
S02B27/01A11 S02B27/01D4

US: 340/442 340/447 342/158 342/359 342/70 342/75 342/77
343/712 701/2 701/29 701/29S 701/2P 701/33.6 701/33.600S
701/34.4 73/146.3

PatBase - US2005273218_AA



Family:

Publication number	Publication date	Application number	Application date
US2005273218 AA	20051208	US20050082739	20050317
US7421321 BB	20080902	US20050082739	20050317

Priority:

US19950476077	19950607	US19950550217	19951030	US19980073403	19980506
US19950571247	19951212	US19970947661	19971009	US19960028046P	19961009
US19980137918	19980820	US19990356314	19990716	US20000645709	20000824
US20000231378P	20000908	US20010269415P	20010216	US20010291511P	20010516
US20010304013P	20010709	US19990170973P	19991215	US20030701361	20031104
US20020188673	20020703	US20010753186	20010102	US20020174709	20020619
US20020330938	20021227	US20030613453	20030703	US20010925062	20010808
US20010767020	20010123	US20010765558	20010119	US20020079065	20020219
US20030642028	20030815	US20030638743	20030811	US20020043557	20020111
US20020423613P	20021104	US20030461648P	20030408	US20020415862P	20021003
US20050082739	20050317	US20050039129	20050119	US20040592838P	20040730

Probable Assignee: AMERICAN VEHICULAR SCIENCES LLC

Assignee(s): (std): AUTOMOTIVE TECH INT

Assignee(s): AUTOMOTIVE TECHNOLOGIES INT ; AUTOMOTIVE TECHNOLOGIES INT INC ; AUTOMOTIVE TECHNOLOGIES INTERNATIONAL INC ; AMERICAN VEHICULAR SCIENCES LLC

Inventor(s): (std): BREED DAVID S ; DUVALL WILBUR E ; JOHNSON WENDELL C

Inventor(s): BREED DAVID ; JOHNSON WENDELL ; DUVALL WILBUR

Agent(s): BRIAN ROFFE ESQ; ROFFE BRIAN; BRIAN

Title: HIGH EFFICIENCY AC DC ELECTRIC **MOTOR, ELECTRIC POWER GENERATING SYSTEM** WITH VARIABLE **SPEED,** VARIABLE POWER, GEOMETRIC ISOLATION AND HIGH EFFICIENCY CONDUCTING ELEMENTS

Abstract: Source: US2015145364A [EN] A method and **apparatus** for reducing electromagnetic drag in an electric machine may include a laminated stator having wire slots disposed around the inner periphery spaced into sectors separated by a pole iron support structure. The slots contain induction windings. A series of wound lateral pole irons may be arranged around the inner periphery of the stator, the first ends of which extend into the slots in the sectors. A support structure supports the lateral pole irons by forming a circular opening concentric with the inner periphery of the stator. A rotor may be inserted into the circular opening of the lateral pole iron support structure and supported at the stator lateral pole iron ends by a support means. A plurality of rotor inserts may contain free-wheeling permanent magnet inserts spaced along an outer periphery of the rotor. The rotor may be inserted into the circular opening of the lateral pole iron support structure and the free-wheeling permanent magnet inserts may be inserted into cavities along the outer periphery of the rotor.

Classifications:

International (IPC 8-9): H02K H02K16/00 H02K41/06 H02K47/14

H02K53/00 H02N H02N11/00 (Advanced/Invention);

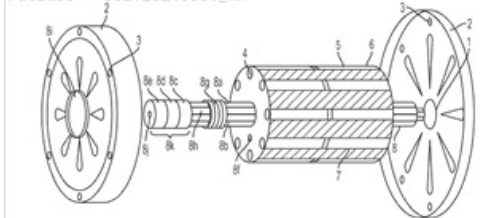
H02K16/00 H02K53/00 H02N11/00 (Core/Invention);

H02K H02N (Subclass/Invention)

CPC: H02K53/00 H02K16/00 H02K21/029

US: 310/113 74/DIG.009 74/DIG.9

PatBase - US2015145364_AA



Family:

Publication number	Publication date	Application number	Application date
AP201508543 A0	20150630	AP20150008543	20130521
AU2013261039 AA	20131121	AU20130261039	20130521
AU2017202527 AA	20170511	AU20170202527	20170418
CA2873973 AA	20141118	CA20132873973	20130521
CL2014003133 A1	20150828	CL20140003133	20141118
CN104662785 A	20150527	CN201380035871	20130521
DOP2014000261 A	20150430	DO20140000261	20141117
EP2878072 A2	20150603	EP20130790424	20130521
EP2878072 A4	20170118	EP20130790424	20130521
HK1207215 A1	20160122	HK20150107615	20150807
ID201604285 A	20160701	ID2015P0004822	20130521
IL235727 A0	20150129	IL20130235727	20130521
IN02979KN2014 A	20150508	IN2014KN02979	20141218
JP2015534423 T2	20151126	JP20150512190T	20130521
KR20150035712 A	20150407	KR20147035680	20130521
MX2014013945 A1	20151113	MX20140013945	20130521
PE05772015 A1	20150527	PE20140002037	20130521
PH2014502559 A	20150121	PH20140502559	20141117
SG11201407477R A1	20141230	SG20141107477	20130521
TH146788 A	20160304	TH20141006901	20130521
TN2014000477 A1	20160330	TN20140000477	20141113
US2015145364 AA	20150528	US20130402007	20130521
WO13090539 A1	20130620	WO2012US69449	20121213
WO13171728 A2	20131121	WO20131B54184	20130521
WO13171728 A3	20140410	WO20131B54184	20130521
ZA201501865 A	20161221	ZA20150001865	20150318

Priority:

AU20130261039	20130521	AU20170202527	20170418	US20110630600P	20111215
US20120688669P	20120518	US20120688668P	20120518	US20130402007	20130521
WO2012US69449	20121213	US20130852304P	20130315	WO20131B54184	20130521
WO2012US69449	20130315				

Probable Assignee: REDEMPTIVE TECHNOLOGIES LTD

Assignee(s): (std): RAY HOLCOMB ROBERT ; REDEMPTECH HOLDINGS PTE LTD ; REDEMPTIVE TECHNOLOGIES LTD ; HOLCOMB ROBERT ; HOLCOMB ROBERT RAY ; REDEMPTIVE TECH LTD

Assignee(s): REDEMPTIVE TECHNOLOGIES HOLCOMB ROBERT RAY LTD ; HOLCOMB ROBERT RAY24 DE CATRO STREETC/O REDEMPTIVE TECHNOLOGIES, LIMITEDAKARA BUILDINGWICKHAMS CAY IROAD TOWN TORTOLAVG ; REDEMPTIVE TECHNOLOGIES LTD24 DE CASTRO STREETAKARA BUILDINGWICKHAMS CAY IROAD TOWN TORTOLA TORTOLAVG ; ROBERT RAY HOLCOMB

Inventor(s): (std): HOLCOMB ROBERT RAY ; RAY HOLCOMB ROBERT ; HOLCOMB ROBERT RAY RR

Inventor(s): ROBERT RAY HOLCOMB ; HOLCOMB ROBERT RAY24 DE CATRO STREETC/O REDEMPTIVE TECHNOLOGIES, LIMITEDAKARA BUILDINGWICKHAMS CAY IROAD TOWN TORTOLAVG

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; CLARKE MODET AND CO CHILE LIMITADA; TOTHILL JOHN PAUL; TAKAHASHI HAYASHI AND PARTNER PATENT ATTORNEYS INC; BABAYI ROBERT S; SCOTT ROBERT 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 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

Title: VEHICLE

Abstract: Source: US2010116571A [EN] A vehicle is a hybrid vehicle including an engine driven by fuel, and the vehicle includes a **motor**-generator driven by electric power and a charge plug to which a connector is removably connected, the charge plug being capable of at least one of being supplied with electric power from the connector and supplying electric power to the connector. An engine is arranged to be offset toward one side surface and the charge plug is provided in the other side surface.

Classifications:

International (IPC 8-9): B60K6/00 B60K6/22 B60K6/24 B60K6/28 B60K6/36 B60K6/365 B60K6/40 B60K6/405 B60K6/42 B60K6/445 B60K6/46 B60K6/48 B60K6/54 B60L11/12 B60L11/14 B60L11/18 B60L9/18 B60W10/08 B60W10/26 B60W20/00 (Advanced/Invention); B60K1/04 B60K6/22 B60K6/405 B60L11/14 B60W10/26 (Advanced/Non-invention); B60K6/00 B60L11/14 B60L9/00 B60W10/08 B60W10/26 B60W20/00 (Core/Invention)

International (IPC 1-7): B60K6/40

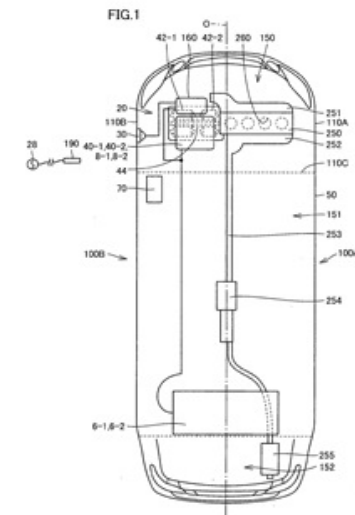
CPC: B60W20/00 B60K6/28 B60K6/365 B60K6/40 B60K6/445 B60K2001/0416 B60L11/123 B60L11/14 B60L11/1818 B60L11/182 B60L11/1877 B60W10/26 Y02T10/6217 Y02T10/6239 Y02T10/6269 Y02T10/6278 Y02T10/7005 Y02T10/705 Y02T10/7072 Y02T10/7077 Y02T90/122 Y02T90/14

European: B60K6/365 B60K6/40 B60K6/445 B60L11/12D B60L11/14 B60L11/18L4A B60L11/18L5 B60L11/18M36 B60W10/26 L60K1/04A3 L60W20/00 Y02T10/62F12 Y02T10/62F2 Y02T10/62F6D Y02T10/62H2 Y02T10/70B Y02T10/70H4 Y02T10/70J2 Y02T10/70J4 Y02T90/12B Y02T90/12D Y02T90/14

US: 180/65.21 180/65.210S 180/65.22 180/65.220P 180/65.25 180/65.250P 180/69.6 180/69.600S 903/903 903/903S 903/951 903/951S 903/952 903/952S

PatBase - US2010116571_AA

Patent Application Publication May 13, 2010 Sheet 1 of 15 US 2010/0116571 A1

**Family:**

Publication number	Publication date	Application number	Application date
BRPI0811014 A2	20150127	BR2008PI11014	20080820
CN101784407 A	20100721	CN200880103913	20080820
CN101784407 B	20130814	CN200880103913	20080820
DE602008034585 D1	20141106	DE200860034585T	20080820
EP2179880 A1	20100428	EP20080792759	20080820
EP2179880 A4	20110713	EP20080792759	20080820
EP2179880 B1	20140924	EP20080792759	20080820
IN05492DN2009 A	20100507	IN2009DN05492	20090826
IN291281 B	20180105	IN2009DN05492	20090826
JP2009028520 A1	20101202	JP20090530136T	20080820
JP5227323 B1	20130703	JP20090530136T	20080820
JP5227323 B2	20130703	JP20090530136T	20080820
KR20100049113 A	20100511	KR20107006372	20080820
RU2430840 C1	20111010	RU20100111102	20080820
US2010116571 AA	20100513	US20080449577	20080820
US2011290572 AA	20111201	US20110137304	20110804
US2011315461 AA	20111229	US20110137303	20110804
US9827971 BB	20171128	US20110137303	20110804
WO09028520 A1	20090305	WO2008JP65233	20080820

Priority:

EP20080792759 20080820 JP20070218284 20070824 US20090449577 20090814
US20110137304 20110804 US20110137303 20110804 JP20090530136 20080820
WO2008JP65233 20080820

Probable Assignee: TOYOTA JIDOSHA KK**Assignee(s):** (std): SUZUKI NAOTO ; TOYOTA MOTOR CO LTD ; TOYOTA MOTOR CORP**Assignee(s):** TOJOTA DZIDOSJA KABUSIKI KAJSSJA ; TOYOTA JIDOSHA KABUSHIKI KAISHA ; TOYOTA JIDOSHA KK ; TOYOTA JIDOSHA TOYOTA SHI KK ; TOYOTA MOTOR CO**Inventor(s):** (std): NAOTO SUZUKI ; SUZUKI NAOTO**Agent(s):** TBK; TBK PATENT; HORII YUTAKA; MORITA TOSHIO; FUKAMI HISAO; OLIFF AND BERRIDGE PLC; OLIFF PLC; FUKAMI HISAO 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 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: HEAT ENERGY RECAPTURE AND RECYCLE AND ITS NEW APPLICATIONS

Abstract: Source: US2005120715A [EN] What has been created is a plurality and a variety of processes and a variety of **devices** correspondingly supportive to each process, wherein, a new partnership between; (1) a heat absorbing radiator compressed air pipes/tubes and (2) a gas turbine engine or a reciprocating piston engine, is used to recapture and reconvert the, otherwise wasted, heat energies expelled by engines, by factories, by smelting plants, by distillation plants, by chillers/coolers/freezers, by cooking ovens, by lamps/stoves, by trash burners, and the heat energies created by the **solar** heat on the desert/ocean water, into electric power and finally into hydrogen-deuterium fuel, by having the engine's tailpipes submerged in cold compressed air inside the heat absorbing radiator pipes in reverse air flow, to further drive and re-drive the same engine; wherein, in order to capture fusion heat energy the hydrogen bomb is detonated in the deep ocean to catch the flames by the water and the hot water is used to energize the compressed air inside the heat absorbing radiator pipes; wherein, in order to produce fusion energy, an abundant electric arc is passed across liquid deuterium or across gaseous deuterium by the electro-plasma torch and sparkplug in the internal combustion engine, and by detonating a dynamite inside a liquid deuterium; wherein diamond is produced by placing carbon inside the hydrogen bomb; and wherein, deuterium fusion flame is used first in smelting glass to large sizes before running an engine.

Classifications:

International (ipc 8-9): B01D61/10 B63B1/10 B63B1/12 B63B35/00 B63B35/44 B63B39/06 B63B43/06 B63G1/00 B63G8/30 B63H19/02 B63H9/06 B63H9/10 B63J3/00 B64C31/04 B64C31/06 E02B3/06 F01K13/00 F01K23/10 F01K27/00 F02C1/00 F02C1/05 F02G5/00 F03B13/18 F03D11/04 F03D5/00 F03D5/04 F03G7/00 F24F5/00 F24F6/14 F28D5/00 (Advanced/Invention);

B63B1/24 B63J1/00 F24F1/00 (Advanced/Non-invention); B01D61/02 B63B1/00 B63B35/00 B63B35/44 B63B43/00 B63H9/00 B63J3/00 E02B3/06 F01K23/10 F01K27/00 F02C1/00 F02G5/00 F03B13/00 F03D5/00 F03G7/00 (Core/Invention)

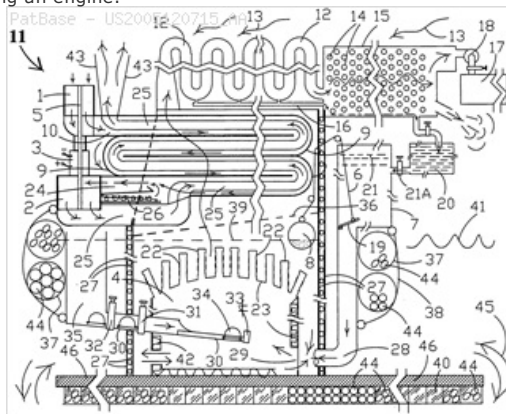
International (ipc 1-7): B01D61/10 B63B17/00 B63B35/00 B63B7/00 F01K23/10 F03D5/02 F03D5/04 F03G7/00 F04B35/00 F24F6/14 F28D5/00

CPC: B63H9/06 B63H9/1021 F05D2260/212 F01K27/00 F02C1/05 F03G7/00 Y02T50/672 Y02T50/676 B63B1/121 Y02W10/33 Y02W10/37 B63B1/107 B63B1/24 B63B39/06 B63B2039/067 B63G1/00 B63G8/30 B63H19/02 B63J1/00 C02F1/04 F05B2240/40 Y02T70/59 B63B35/00 B63B43/06 B63J3/00 E02B3/062 E02B2017/0091 F03B13/182 F03D5/04 F24F5/0035 F24F6/14

Y02B10/30 Y02B10/50 Y02E10/38 F03D13/20 F28D5/00 B01D61/10 B63B35/44 B63B2035/446 B63B2035/4466 B64C31/04 B64C31/06 F03D5/00 F05B2240/921 F05B2240/922 F24F2001/0088 Y02B30/545 Y02E10/70 Y02E10/728 B63H9/10 F05B2210/18 Y02A20/131 Y02A20/144 Y02A10/14

European: B01D61/10 B63B1/10C B63B1/12B B63B35/00 B63B35/44 B63B39/06 B63B43/06 B63G1/00 B63G8/30 B63H19/02 B63H9/06 B63H9/10 B63H9/10C B63J3/00 B64C31/04 B64C31/06 E02B3/06B F01K27/00 F02C1/05 F03B13/18B2D F03D11/04 F03D5/00 F03D5/04 F03G7/00 F24F5/00C7 F24F6/14 F28D5/00 L63B1/24 L63B35/44 L63B35/44E7 L63B35/44E9 L63B39/06R L63B43/06 L63H9/10 L63J1/00 L63J3/00 M02F1/04 P02B17/00M R05B210/18 R05B240/40 R05B240/921 R05B240/922 R05B240/931 R05B260/212 R24F1/00G1 Y02B10/30 Y02B10/50 Y02B30/14 Y02B30/54D Y02E10/38 Y02E10/70 Y02E10/72L Y02E10/72N Y02E20/18 Y02T50/67B2 Y02T50/67F2 Y02T70/59

US: 114/102 114/267 114/382 114/39.1 114/39.2 114/39.26 114/39.29 114/39.31 210/136 210/170 210/259 210/321.87 244/153.00R 244/153R 244/24 405/76 415/5 416/8 417/330 417/332 60/39.01 60/506 60/618 60/618P 60/676 60/698 60/698P 60/772 62/304 62/310 62/314 623/40

**Family:**

Publication number	Publication date	Application number	Application date
AP200704109 A0	20070831	AP20070004109	20050727
AU2005325208 AA	20060727	AU20050325208	20050727
AU2005325208 BB	20120329	AU20050325208	20050727
CA2397847 AA	20040212	CA20022397847	20020812
CA2404410 AA	20040320	CA20022404410	20020920
CA2599414 AA	20070823	CA20052599414	20050727
CN101146981 A	20080319	CN200580049207	20050727
EA200701538 A1	20081030	EA20070001538	20050727
EP1851418 A1	20071107	EP20050779535	20050727
EP1851418 A4	20090513	EP20050779535	20050727
IN05612DN2007 A	20070831	IN2007DN05612	20070719
US2005120715 AA	20050609	US20050039624	20050120
US2008155985 AA	20080703	US20050795835	20050727
US4756666 A	19880712	US19840631321	19840719
US4859146 A	19890822	US19880177599	19880405
US5027735 A	19910702	US19900472753	19900131
US5052902 A	19911001	US19860820082	19860121
US5056447 A	19911015	US19880255657	19881013
US5094595 A	19920310	US19890376002	19890815
US5435259 A	19950725	US19930097655	19930727
US5507943 A	19960416	US19910811470	19911218
US6293121 BA	20010925	US19980137499	19980820
US6327994 BA	20011211	US19970999729	19971223
US8051637 BB	20111108	US20050795835	20050727
WO06078315 A1	20060727	WO2005US26793	20050727
WO06078315 C1	20061102	WO2005US26793	20050727

Priority:

CA20022397847	20020812	CA20022404410	20020920	PH20040000148	20040325
US19880255719	19881013	US19860820082	19860121	US19840631321	19840719
US19880177599	19880405	US19880255657	19881013	US19840631322	19840719
US20050795835	20050727	US19970058062P	19970905	US19900472753	19900131
US19890376002	19890815	US19930097655	19930727	US19910773680	19911008
US19950506335	19950725	US19910811470	19911218	US20050039624	20050120
WO2005US26793	20050727	US19970999729	19971223	US19980137499	19980820

Probable Assignee: CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Assignee(s): (std): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST ; CHRISTION SCHOOL OF TECHNOLOGY ; LABRADOR GAUDENCIO A ; LABRADOR GAUDENCIO AQUINO ; GAUDENCIO LABRADOR ; LABRADOR GAUDENCIO ; CHRISTIAN SCHOOL OF TECHNOLOGY

Assignee(s): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Inventor(s): (std): LABRADOR GAUDENCIO AQUINO ; CHRISTIAN SCHOOL OF TECHNOLOGY ; LABRADOR GAUDENCIO A

Inventor(s): GAUDENCIO AQUINO LABRADOR ; LABRADOR GAUDENCIO ; CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE

Agent(s): ROGER SYN AND CO PATENT AND TRADE MARK ATTORNEYS; FURMAN AND KALLIO; OYEN WIGGS GREEN AND MUTALA LLP; GAUDENCIO AQUINO LABRADOR

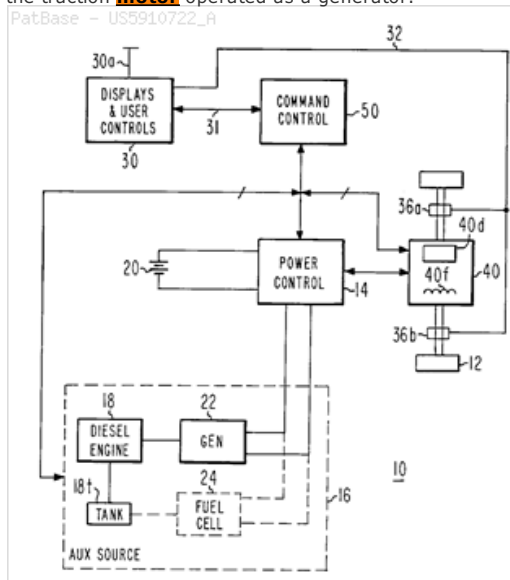
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT 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

Abstract: Source: US5910722A [EN] An electric vehicle is controlled to conform its operation to that of a conventional internal-combustion-engine powered vehicle. In some embodiments, the charging of the batteries by the auxiliary source of electricity and from dynamic braking is ramped in magnitude when the batteries lie in a state of charge between partial charge and full charge, with the magnitude of the charging being related to the relative state of charge of the battery. The deficiency between traction **motor** demand and the energy available from the auxiliary electrical source is provided from the batteries in an amount which depends upon the state of the batteries, so that the full amount of the deficiency is provided when the batteries are near full charge, and little or no energy is provided by the batteries when they are near a discharged condition. At charge states of the batteries between near-full-charge and near-full-discharge, the batteries supply an amount of energy which depends monotonically upon the charge state. Charging of the batteries from the auxiliary source is reduced during dynamic braking when the batteries are near full charge. Control of the amount of energy returned during dynamic braking may be performed by control of the transducing efficiency of the traction **motor** operated as a generator.

International (PC 8-9): B60K1/00 B60K25/10 B60K41/00 B60K6/04
B60K6/20 B60K6/28 B60K6/32 B60K6/46 B60L11/00 B60L11/12
B60L11/18 B60L15/00 B60L15/02 B60L7/00 B60L7/12 B60L7/14
B60L7/22 B60W10/06 B60W10/08 B60W10/18 B60W10/26
B60W10/28 B60W20/00 B60W30/18 B64G1/26 F02D29/02
F02D29/06 F02K9/50 F02K9/58 F02K9/68 H01M10/46 H02J7/00
H02J7/14 (Advanced/Invention);
B60L11/12 B60L7/12 B64G1/42 (Advanced/Non-invention);
B60K6/00 B60L11/00 B60L11/02 B60L11/18 B60L10/06 B60W10/06
B60W10/08 B60W10/26 B60W10/28 B60W20/00
F02D29/06 (Core/Invention);
B64G1/42 (Core/Non-invention)

CPC: Y10S903/903 Y10S903/947 Y02T90/34 B60W2510/246
Y02T10/6269 B60W20/13 B60K6/46 B60L7/14 B60L11/123
B60L11/1861 B60L11/1887 B60L22/12 B60L2250/16 B60W10/08
B60W10/18 B60W10/26 B60W20/00 B60W30/18127 B64G1/26
B64G1/425 B64G1/428 F02K9/50 F02K9/58 F02K69/68 Y02T10/6217
Y02T10/7005 Y02T10/7044 Y02T10/705 Y02T10/7077 Y02T10/7258

US: 180/165 180/65.1 180/65.2 180/65.245 180/65.27 180/65.285 180/65.29 180/65.3 180/65.6 180/65.8 318/376 320/104
701/22 903/903 903/925 903/940 903/942 903/943 903/947



Publication number	Publication date	Application number	Application date
AR017649 AA	20010912	AR1998P105904	19981120
AR017650 AA	20010912	AR1998P105905	19981120
AR017651 AA	20010912	AR1998P105906	19981120
AR020049 AA	20020410	AR1998P105903	19981120
BRPI9804712 A	19991123	BR1998PI04712	19981119
BRPI9804724 A	20010320	BR1998PI04724	19981120
BRPI9804725 A	20010320	BR1998PI04725	19981120
BRPI9804727 A	20010320	BR1998PI04727	19981120
BRPI9804727 B1	20121211	BR1998PI04727	19981120
CA2254025 AA	19990521	CA19982254025	19981112
CA2254025 C	20060321	CA19982254025	19981112
CA2254026 AA	19990521	CA19982254026	19981112
CA2254026 C	20060404	CA19982254026	19981112
CA2254027 AA	19990521	CA19982254027	19981112
CA2254027 C	20060321	CA19982254027	19981112
CA2254028 AA	19990521	CA19982254028	19981112
CA2254028 C	20060328	CA19982254028	19981112
CL1998002808 A1	19990512	CL19980002808	19981120
CL1998002810 A1	19990601	CL19980002810	19981120
CL1998002811 A1	19990713	CL19980002811	19981120
CL43146 B	20070711	CL19980002808	19981120
CL44103 B	20080930	CL19980002811	19981120
CL44841 B	20090306	CL19980002810	19981120
CN1125738 C	20031029	CN19981023389	19981121
CN1146510 C	20040421	CN19981023152	19981121
CN1182985 C	20050105	CN19981025813	19981121
CN1191947 C	20050309	CN19981025829	19981121
CN1225317 A	19990811	CN19981023389	19981121
CN1225872 A	19990818	CN19981025829	19981121
CN1226484 A	19990825	CN19981023152	19981121
CN1226487 A	19990825	CN19981025813	19981121
CZ9803781 A3	19991013	CZ19980003781	19981120
CZ9803782 A3	19991117	CZ19980003782	19981120
CZ9803783 A3	19991117	CZ19980003783	19981120
CZ9803784 A3	19991117	CZ19980003784	19981120
DE69815471 D1	20030717	DE19986015471	19981119
DE69815471 T2	20040506	DE19986015471T	19981119

DE69821588 D1	20040318	DE19986021588	19981119
DE69821588 T2	20041230	DE19986021588T	19981119
DE69842793 D1	20120913	DE19986042793	19981118
DE69842794 D1	20120913	DE19986042794	19981118
EP0917978 A2	19990526	EP19980121583	19981119
EP0917978 A3	19991222	EP19980121583	19981119
EP0917978 B1	20030611	EP19980121583	19981119
EP0917981 A1	19990526	EP19980121924	19981118
EP0917981 B1	20120718	EP19980121924	19981118
EP0917982 A1	19990526	EP19980121925	19981118
EP0917982 B1	20120718	EP19980121925	19981118
EP0921024 A2	19990609	EP19980121584	19981119
EP0921024 A3	19991222	EP19980121584	19981119
EP0921024 B1	20040211	EP19980121584	19981119
ES2201394 T3	20040316	ES19980121583T	19981119
ES2213253 T3	20040816	ES19980121584T	19981119
ES2388653 T3	20121017	ES19980121924T	19981118
ES2388654 T3	20121017	ES19980121925T	19981118
ID22196 A	19990916	ID19980001507	19981118
ID22261 A	19990923	ID19980001508	19981118
ID22535 A	19991104	ID19980001510	19981118
ID23060 A	20000120	ID19980001509	19981118
JP11234806 A2	19990827	JP19980332378	19981124
JP11234807 A2	19990827	JP19980332380	19981124
JP11243603 A2	19990907	JP19980332381	19981124
JP11252710 A2	19990917	JP19980332379	19981124
JP2009247212 A2	20091022	JP20090176851	20090729
JP2014012520 A2	20140123	JP20130170243	20130820
JP5606700 B2	20141015	JP20090176851	20090729
KR100568726 B1	20060712	KR19980050082	19981121
KR100568727 B1	20060920	KR19980050083	19981121
KR100568728 B1	20060823	KR19980050084	19981121
KR100577450 B1	20070425	KR19980050081	19981121
KR19990045482 A	19990625	KR19980050081	19981121
KR19990045483 A	19990625	KR19980050082	19981121
KR19990045484 A	19990625	KR19980050083	19981121
KR19990045485 A	19990625	KR19980050084	19981121
MXPA98009727 A1	20020507	MX19980009727	19981119
MY114827 A	20030131	MY19980005232	19981118
MY114974 A	20030228	MY19980005274	19981119
MY117149 A	20040531	MY19980005222	19981117
MY128074 A	20070131	MY19980005233	19981118
NO316262 B1	20040105	NO19980005419	19981120
NO985417 A	19990525	NO19980005417	19981120
NO985417 A0	19981120	NO19980005417	19981120
NO985418 A	19990525	NO19980005418	19981120
NO985418 A0	19981120	NO19980005418	19981120
NO985419 A	19990525	NO19980005419	19981120
NO985419 A0	19981120	NO19980005419	19981120
NO985420 A	19990525	NO19980005420	19981120
NO985420 A0	19981120	NO19980005420	19981120
PL329781 A1	19990524	PL19980329781	19981119
PL329782 A1	19990524	PL19980329782	19981119
PL329783 A1	19990524	PL19980329783	19981119
PL329784 A1	19990524	PL19980329784	19981119
RU2223183 C2	20040210	RU19980121413	19981120
RU98120904 A	20000827	RU19980120904	19981120
RU98121413 A	20000827	RU19980121413	19981120
RU98121414 A	20000827	RU19980121414	19981120
RU98121415 A	20000827	RU19980121415	19981120
TH12215 B	20020315	TH19981004415	19981116
TH36272 A	19991215	TH19981004414	19981116
TH36273 A	19991215	TH19981004415	19981116
TH36274 A	19991215	TH19981004416	19981116
TR9802395 A2	19990621	TR19980002395	19981120
TR9802395 A3	19990621	TR19980002395	19981120
TR9802396 A2	19990621	TR19980002396	19981120
TR9802396 A3	19990621	TR19980002396	19981120
TR9802397 A2	19990621	TR19980002397	19981120
TR9802397 A3	19990621	TR19980002397	19981120
TR9802398 A2	19990621	TR19980002398	19981120
TR9802398 A3	19990621	TR19980002398	19981120
TW469233 B	20011221	TW19980119341	19990127
TW470713 B	20020101	TW19980119344	19990127
TW577835 B	20040301	TW19980119343	19990127
US5910722 A	19990608	US19980044669	19980320
US5929595 A	19990727	US19980044671	19980320
US5941328 A	19990824	US19980044676	19980320
US6116368 A	20000912	US19980044670	19980320

Priority:

CA19982254025 19981112

CA19982254025 19981112

CA19982254026 19981112

JP19980332379	19981124	CA19982254027	19981112	CA19982254028	19981112
JP20090176851	19981124	EP19980121924	19981118	EP19980121925	19981118
US19980066736P	19981121	KR19980050081	19981121	KR19980050082	19981121
KR19980050083	19981121	KR19980050084	19981121	US19980044671	19980320
US19980044670	19980320	US19980044669	19980320	US19970066736P	19971121
US19980044676	19980320	US19970066736	19971121	US19980044669	19980330

Probable Assignee: BAE SYSTEMS CONTROLS INC

Assignee(s): (std): LOCKHEED CORP ; LOCKHEED MARTIN CORP ; BAE SYS CONTROLS INC ; BAE SYSTEM CONTROL CO LTD ; BAE SYSTEM CONTROL CORP ; BAE SYSTEM CONTROL L L C ; BAE SYSTEMS AND AND ARMAMENTS L P

Assignee(s): BAE SYSTEMS AND AND ARMAMENTS LP ; BAE SYSTEM CONTROL LLC ; BAE SYSTEM CONTROL COLTD ; BAE SYSTEMS CONTROLS INC ; LYONS ARTHUR P ; GREWE TIMOTHY M ; BAE SYSTEMS CONTROLS INC JOHNSON CITY

Inventor(s): (std): GREWE TIMOTHY M ; GRIV TIMOTI MAJKL ; LAJONZ ARTUR POLL ; LYONS ARTHUR P ; LYONS ARTHUR PAULL ; LYONS A P ; GREWE TIMOTHY MICHAEL ; GREWE T M ; ARTHUR PAULL LYONS ; TIMOTHY MICHAEL GREWE

Inventor(s): TM GREWE ; LYONS ARTHUR PAULL GREWE TIMOTHY MICHAEL ; LYONS ARTHUR PAULL MAINE ; T M GREWE ; GREWE TIMOTHY MICHAEL ENDICOTT ; A P LYONS ; AP LYONS

Agent(s): MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; HARNECKER; MITSCHERLICH PATENT U RECHTSANWALTE PARTMBB; KOERBER MARTIN HANS

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

Title: WIRELESS AND POWERLESS SENSOR AND INTERROGATOR

Abstract: Source: US2004130442A [EN] Arrangement and method for monitoring a tire mounted to the vehicle in which a thermal radiation detecting **device** detects the temperature of the tire at different circumferential locations along the circumference of the tire. The detected temperatures of the tire are analyzed to determine, for example, whether a difference in thermal radiation is present between the circumferential locations of the tire, and if so, an action is effected in response to the analysis. The thermal radiation detecting **devices** are preferably supplied with power wirelessly, e.g., through an inductive **system**, a capacitive **system** or a radio frequency energy transfer **system**.

Classifications:

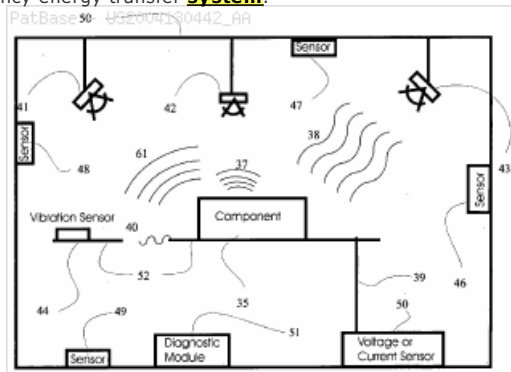
International (IPC 8-9): B60C11/24 B60C19/00 B60C23/04
B60C23/06 B60N2/02 B60N2/28 B60R21/16 B60R21/20 B60R21/213
B60R21/231 B60R21/233 B60R21/235 B60R21/30 G02B27/01
G06F7/00 G07C5/00 G07C5/08 (Advanced/Invention);
B60R21/00 G02B27/00 (Advanced/Non-invention)

International (IPC 1-7): B60C23/00

CPC: B60N2002/0272 B60C19/00 B60C11/24 B60C11/246
B60C23/0449 B60N2/0232 B60N2/0276 B60N2/2863 B60R21/20
B60R21/213 B60R21/232 B60R21/233 B60R21/235 B60R21/30
B60R2021/0004 B60R2021/23107 B60R2021/23153 B60R2021/23161
B60R2021/23169 B60R2021/23519 B60R2021/23523
B60R2021/23557 B60R2021/2358 B60R2021/2359 G02B27/01
G02B2027/014 G02B2027/0187 G06K7/10178 G07C5/008
G07C5/0808 G06K9/00838 G06K9/2018 G06K9/6269 G06K9/00832
G06K9/66

European: B60C11/24 B60C19/00 B60C23/04C6D2B B60N2/02B4
B60N2/02B6W B60N2/28P4 B60R21/16B2B B60R21/16B2V
B60R21/16B4 B60R21/20 B60R21/20K B60R21/213 B60R21/232 B60R21/233 B60R21/235 B60R21/30 G02B27/01
G06K7/10A3C G07C5/00T G07C5/08D L60R21/00A1 L60R21/231C L60R21/231M L60R21/231N L60R21/231P L60R21/235M3
L60R21/235M5 L60R21/235P6 L60R21/235S4 L60R21/235S6 S02B27/01A11 S02B27/01D4

US: 340/443 340/443P 340/449 340/449S 701/29 701/31.4 701/33.9



Family:

Publication number	Publication date	Application number	Application date
US2004130442 AA	20040708	US20030701361	20031104
US6988026 BB	20060117	US20030701361	20031104

Priority:

US19950476077	19950607	US19950550217	19951030	US19980073403	19980506
US19950571247	19951212	US19970947661	19971009	US19960028046P	19961009
US19980137918	19980820	US19990356314	19990716	US20000645709	20000824
US20010304013P	20010709	US20010291511P	20010516	US20010269415P	20010216
US20000231378P	20000908	US19990170973P	19991215	US20030701361	20031104
US20020188673	20020703	US20010753186	20010102	US20030613453	20030703
US20020330938	20021227	US20020174709	20020619	US20010925062	20010808
US20010767020	20010123	US20030642028	20030815	US20030638743	20030811
US20020079065	20020219	US20020043557	20020111	US20010765558	20010119
US20030461648P	20030408	US20020423613P	20021104	US20020415862P	20021003

Probable Assignee: AMERICAN VEHICULAR SCIENCES LLC

Assignee(s): (std): AUTOMOTIVE TECH INT

Assignee(s): AUTOMOTIVE TECHNOLOGIES INT ; AUTOMOTIVE TECHNOLOGIES INT INC ; AUTOMOTIVE TECHNOLOGIES INTERNATIONAL INC ; BREED DAVID S ; DUVALL WILBUR E ; SHOSTAK OLEKSANDR T ; KOLOMEYKO ANATOLIY V ; JOHNSON WENDELL C ; AMERICAN VEHICULAR SCIENCES LLC

Inventor(s): (std): BREED DAVID S ; DUVALL WILBUR E ; JOHNSON WENDELL C ; KOLOMEYKO ANATOLIY V ; SHOSTAK OLEKSANDR T

Agent(s): BRIAN

Title: EMERGENCY SUPPLIES PRE-POSITIONING AND ACCESS CONTROL METHOD

Abstract: Source: US2007203727A [EN] One provides (101) a plurality of carriable containers having emergency supplies contained therein wherein each of these carriable containers is readily carriable by an average adult human. These carriable containers are then placed (103) within one or more corresponding controlled access containers as are provided at one or more publicly accessible locations (102). Prior to a triggering catastrophic event, one or more specific authorized beneficiaries are then preauthorized (104) to have catastrophic event-based access to one or more of these carriable containers. So configured, the authorized beneficiary(s) will in turn have access to the corresponding emergency supplies that are contained within the carriable container when a triggering catastrophic event occurs.

Classifications:

International (ipc 8-9): A01B71/06 A45F5/00 A47F1/04

A61B17/3213 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/04 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 E04H14/00 E04H9/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/173 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06K7/01 G06Q10/00 G06Q30/00 G06Q30/06 G06Q40/00 G06Q50/00 G06Q50/26 G06Q90/00 G06Q99/00 G09B19/00 G21F3/00 H04H1/00 H04H20/59 H04L9/00 H04M11/04 (Advanced/Invention); G06Q90/00 (Advanced/Non-invention);

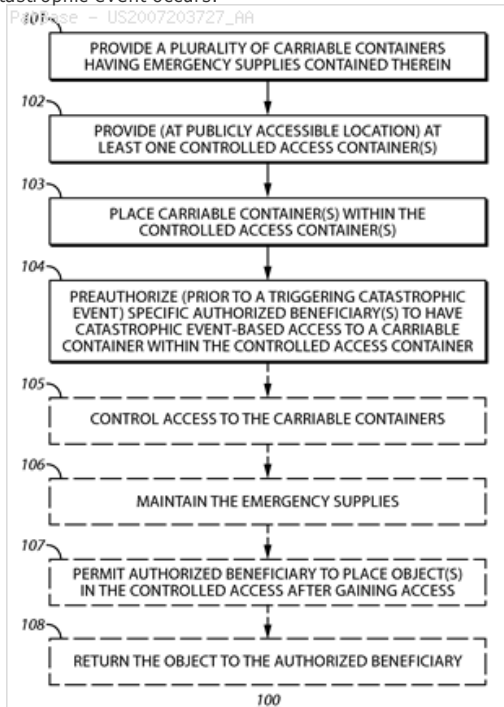
A01B71/00 A45F5/00 A47F1/00 A61B17/32 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/00 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/16 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06Q10/00 G06Q30/00 G06Q40/00 G06Q50/00 G06Q99/00 G09B19/00 G21F3/00 H04H1/00 H04L9/00 H04M11/04 (Core/Invention)

CPC: G06Q30/0283 G08B27/008 H04H20/59 H04H60/23 G06Q30/02 G06Q90/00 G06Q50/00 G06Q30/04 G06Q10/06 G06Q50/163 G06Q50/30 G06Q30/00 G06Q30/0214 G06Q30/0217 G06Q30/0226 G06Q30/0227 G06Q30/0231 G06Q30/0233 G07F17/0042 E04H9/08 E04H9/12 F41H5/24 G06Q10/10 A62B31/00 B63C9/02 A62B99/00 A62B1/02 E04H9/06 H04L63/10 G07C9/00087 B01D46/0023 B01D46/0036 B01D2273/30 G21F3/00 G06Q30/06 G06Q30/0633 G06Q10/087 A61B50/10 A61B50/13 A61B50/312 G06Q40/08 A45C15/00 G06Q10/08 G06Q50/265 G06Q99/00 G06Q10/02 G06Q50/26 Y02A50/454 Y02A50/14 G16H40/20 G16H50/80 A47K11/026 G06Q20/401 G06Q50/22 E04H9/14 G06Q10/00 G06Q50/10

European: A45C15/00 A47K11/02C A61B19/02F A61B19/02P4D

A62B1/02 A62B31/00 A62B99/00 B01D46/00D4 B01D46/00F60 B63C9/02 E04H9/06 E04H9/08 E04H9/12 E04H9/14 F41H5/24 G06F19/32G G06Q10/00 G06Q10/02 G06Q10/06 G06Q10/08 G06Q10/08E G06Q10/10 G06Q20/401 G06Q30/00 G06Q30/02 G06Q30/0214 G06Q30/0217 G06Q30/0226 G06Q30/0227 G06Q30/0231 G06Q30/0233 G06Q30/0283 G06Q30/04 G06Q30/06 G06Q40/08 G06Q50/00 G06Q50/10 G06Q50/163 G06Q50/22 G06Q50/26 G06Q50/265 G06Q50/30 G06Q90/00 G06Q99/00 G07C9/00B6D4 G07F17/00D G07F7/00D G08B27/00T G21F3/00 H04H20/59 K61B19/02F2 K62B99/00 L01D273/30 S06F19/34S T04H60/23 T04L29/06S10 T04L63/10 Y04S50/12

US: 141/10 180/14.1 180/14.100P 198/321 224/101 235/382.5 235/382.500S 250/472.1 250/519.1 345/85P 379/37 379/37P 434/236 434/236S 455/3.01 455/3.010 52/169.6 52/3 52/741.1 52/741.100S 52/745.05 52/745.050P 52/79.1 52/79.100S 600/300 600/300P 701/23 705/1 705/1.1 705/1.100P 705/14.16 705/14.160P 705/14.19 705/14.190S 705/14.27 705/14.270S 705/14.28 705/14.280S 705/14.31 705/14.310S 705/14.33 705/14.330S 705/2 705/26.8 705/2P 705/314 705/314P 705/325 705/325S 705/400 705/400P 705/5 705/500 705/500P 705/52 705/52P 705/5P 705/75 705/75S 707/802 707/802S 707/E17.005 707/E17.005S 726/2 726/2S 96/222 96/222P

**Family:**

Publication number	Publication date	Application number	Application date
US2007203727 AA	20070830	US20060456472	20060710
US2007214729 AA	20070920	US20060535282	20060926
US2007215434 AA	20070920	US20060555896	20061102
US2007217577 AA	20070920	US20060426231	20060623
US2007219420 AA	20070920	US20060462845	20060807
US2007219421 AA	20070920	US20060464751	20060815
US2007219422 AA	20070920	US20060464764	20060815
US2007219423 AA	20070920	US20060464788	20060815
US2007219424 AA	20070920	US20060464799	20060815
US2007219425 AA	20070920	US20060465063	20060816
US2007219426 AA	20070920	US20060466727	20060823
US2007219427 AA	20070920	US20060466953	20060824
US2007219428 AA	20070920	US20060531651	20060913
US2007219429 AA	20070920	US20060535021	20060925
US2007219430 AA	20070920	US20060539798	20061009
US2007219431 AA	20070920	US20060549874	20061016
US2007219810 AA	20070920	US20060279333	20060411
US2007219812 AA	20070920	US20060381265	20060502
US2007219813 AA	20070920	US20060421694	20060601
US2007219814 AA	20070920	US20060537469	20060929
US2007219913 AA	20070920	US20060381277	20060502
US2007219914 AA	20070920	US20060383022	20060512
US2007223658 AA	20070927	US20060566455	20061204
US2007225993 AA	20070927	US20060551083	20061019
US2007225994 AA	20070927	US20060554452	20061030
US2007225995 AA	20070927	US20060556520	20061103
US2007228090 AA	20071004	US20060559278	20061113
US2007232220 AA	20071004	US20060461605	20060801
US2007233501 AA	20071004	US20060384037	20060317

US2007233506 AA	20071004	US20060548191	20061010
US2007239480 AA	20071011	US20060394350	20060330
US2007256564 AA	20071108	US20060381677	20060504
US2007261899 AA	20071115	US20060423594	20060612
US2007276681 AA	20071129	US20060550594	20061018
US2008195426 AA	20080814	US20060470156	20060905
US2008255868 AA	20081016	US20080047130	20080312
US2008275308 AA	20081106	US20060539861	20061009
US2008319766 AA	20081225	US20060381257	20060502
US2009100772 AA	20090423	US20060381247	20060502
US2009112777 AA	20090430	US20060461624	20060801
US2009125316 AA	20090514	US20060420594	20060526
US2009321663 AA	20091231	US20060425043	20060619
US2010250352 AA	20100930	US20060555589	20061101
US2010312722 AA	20101209	US20060532461	20060915
US2011030310 AA	20110210	US20060462795	20060807
US2014143088 AA	20140522	US20060464775	20060815
WO07109532 A2	20070927	WO2007US64162	20070316
WO07109532 A3	20080703	WO2007US64162	20070316
WO07115184 A2	20071011	WO2007US65658	20070330
WO07115184 A3	20071221	WO2007US65658	20070330
WO07121248 A2	20071025	WO2007US66441	20070411
WO07121248 A3	20071221	WO2007US66441	20070411
WO07127732 A2	20071108	WO2007US67303	20070424
WO07127732 A3	20081106	WO2007US67303	20070424
WO07133670 A2	20071122	WO2007US11375	20070511
WO07133670 A3	20090108	WO2007US11375	20070511
WO07140363 A2	20071206	WO2007US69878	20070529
WO07140363 A3	20081106	WO2007US69878	20070529
WO07146929 A2	20071221	WO2007US70983	20070612
WO07146929 A3	20081113	WO2007US70983	20070612
WO07146935 A2	20071221	WO2007US70997	20070612
WO07146935 A3	20090319	WO2007US70997	20070612
WO08008784 A2	20080117	WO2007US73163	20070710
WO08008784 A3	20080403	WO2007US73163	20070710
WO08022193 A2	20080221	WO2007US75999	20070815
WO08022193 A3	20081106	WO2007US75999	20070815
WO08022193 C2	20080424	WO2007US75999	20070815
WO08024913 A2	20080228	WO2007US76644	20070823
WO08024913 A3	20081127	WO2007US76644	20070823
WO08027981 A2	20080306	WO2007US77135	20070829
WO08027981 A3	20080508	WO2007US77135	20070829
WO08030866 A2	20080313	WO2007US77627	20070905
WO08030866 A3	20081106	WO2007US77627	20070905
WO08033993 A2	20080320	WO2007US78383	20070913
WO08033993 A3	20081106	WO2007US78383	20070913
WO08034014 A2	20080320	WO2007US78418	20070913
WO08034014 A3	20080508	WO2007US78418	20070913
WO08036672 A2	20080327	WO2007US78782	20070918
WO08036672 A3	20080508	WO2007US78782	20070918
WO08042797 A2	20080410	WO2007US79956	20070928
WO08042797 A3	20081211	WO2007US79956	20070928
WO08048737 A2	20080424	WO2007US74958	20070801
WO08048737 A3	20081009	WO2007US74958	20070801
WO08048956 A2	20080424	WO2007US81511	20071016
WO08048956 A3	20080814	WO2007US81511	20071016
WO08054909 A2	20080508	WO2007US75380	20070807
WO08054909 A3	20080731	WO2007US75380	20070807
WO08054916 A2	20080508	WO2007US76010	20070815
WO08054916 A3	20080717	WO2007US76010	20070815
WO08057769 A2	20080515	WO2007US82404	20071024
WO08057769 A3	20080717	WO2007US82404	20071024
WO08060807 A2	20080522	WO2007US81817	20071018
WO08060807 A3	20080731	WO2007US81817	20071018
WO08069790 A2	20080612	WO2006US46374	20061205
WO08069790 A3	20081211	WO2006US46374	20061205
WO08073527 A2	20080619	WO2007US74645	20070727
WO08073527 A3	20080807	WO2007US74645	20070727
WO08082744 A2	20080710	WO2007US81676	20071017
WO08082744 A3	20081120	WO2007US81676	20071017
WO08082746 A2	20080710	WO2007US81976	20071019
WO08082746 A3	20080918	WO2007US81976	20071019
WO08085573 A2	20080717	WO2007US81265	20071012
WO08085573 A3	20081211	WO2007US81265	20071012
WO08085584 A2	20080717	WO2007US83018	20071030
WO08085584 A3	20080925	WO2007US83018	20071030
WO08088589 A2	20080724	WO2007US79228	20070921
WO08088589 A3	20081113	WO2007US79228	20070921
WO08088590 A2	20080724	WO2007US79394	20070925
WO08088590 A3	20081030	WO2007US79394	20070925
WO08088591 A2	20080724	WO2007US79499	20070926

~~WO08089527~~ A2	~~200807137~~	~~WO2007US83211~~	~~20071031~~	
WO08091427 A3	20081023	WO2007US83211	20071031	
WO08143691 A1	20081127	WO2007US82654	20071026	

Priority:

US20060279333	20060411	US20060361247	20060224	US20060381265	20060502
US20060381257	20060502	US20060381247	20060502	US20060379929	20060424
US20060381677	20060504	US20060423594	20060612	US20060421694	20060601
US20060420594	20060526	US20060383022	20060512	US20060381277	20060502
US20060394350	20060330	US20060384037	20060317	US20060464764	20060815
US20060462845	20060807	US20060462795	20060807	US20060461624	20060801
US20060461605	20060801	US20060456472	20060710	US20060426231	20060623
US20060425043	20060619	US20060464788	20060815	US20060464799	20060815
US20060464751	20060815	US20060464775	20060815	US20060465063	20060816
US20060466727	20060823	US20060466953	20060824	US20060470156	20060905
US20060556620	20061103	US20060566455	20061204	US20060555896	20061102
US20060556520	20061103	US20060559278	20061113	US20060549874	20061016
US20060537469	20060929	US20060531651	20060913	US20060532461	20060915
US20060535021	20060925	US20060539798	20061009	US20060539861	20061009
US20060548191	20061010	US20060550594	20061018	US20060551083	20061019
US20060554452	20061030	US20060555589	20061101	US20060820628P	20060728
US20060823806P	20060829	US20060825524P	20060913	US20060825976P	20060918
US20060826491P	20060921	US20060827591P	20060929	US20060827820P	20061002
US20060827828P	20061002	US20060828341P	20061005	US20060828342P	20061005
US20060829447P	20061013	US20060829779P	20061017	US20060862398P	20061020
US20060862718P	20061024	US20060535282	20060926	US20080047130	20080312
US20060863292P	20061027	US20060864302P	20061103	US20070894350P	20070312
US20060863469P	20061030	US20060863481P	20061030		

Probable Assignee: SOVEREIGN DEED LLC

Assignee(s): (std): BOTOS MATTHEW J ; MOORE BARRETT H ; SEIDEL GREGORY E ; SOVEREIGN DEED LLC

Inventor(s): (std): BOTOS MATTHEW J ; MOORE BARRETT H ; SEIDEL GREGORY E

Inventor(s): MOORE BARRETT

Agent(s): FITCH EVEN TABIN AND FLANNERY; KRATZ RUDY; KRATZ RUDY I; KRUEGER JAMES P; KRATZ RUDY I ET AL; SAMPLES KENNETH H ET AL

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

Title: ONLINE TRADING AND DYNAMIC ROUTING OF ELECTRIC POWER AMONG ELECTRIC SERVICE PROVIDERS

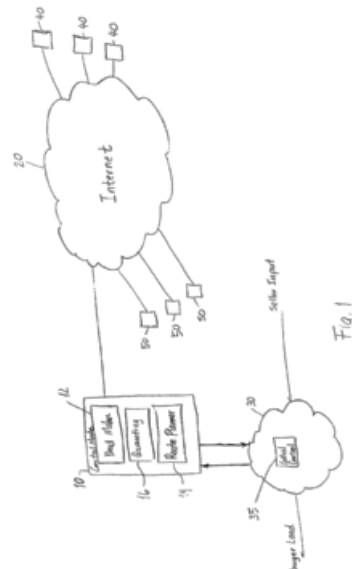
Abstract: Source: US2002046155A [EN] A method and **system** for trading electric power on a spot market and dynamically matches bids and asks and routes the electric power in accordance with the matches to effect the settled trades. A control node is arranged for receiving bids and asks via a wide area network. The control node is also connected to a transmission **system** and a central control of the transmission **system** to dynamically switch the transmission **system** to effect the matched bids and asks.

Classifications:

International (IPC 8-9): B60L11/18 B60L7/12 B60L8/00 G05B15/02 G05D11/00 G06Q10/06 G06Q40/00 G06Q40/04 G06Q50/00 G06Q50/06 H02J3/00 H02J7/00 H02J7/02 H02J7/04 H02J7/14 (Advanced/Invention); B60L11/18 H02J5/00 (Advanced/Non-invention); G05D11/00 G06Q40/00 G06Q50/00 H02J7/00 (Core/Invention)
International (IPC 1-7): G05D11/00 G06F17/60
CPC: G06Q40/00 G06Q40/06 B60L11/185 B60L11/1838 B60L11/1831 H02J7/0027 Y02T90/12 Y02T90/125 B60L11/1846 B60L2230/22 B60L2230/24 B60L2230/30 B60L2230/32 Y02E60/721 Y02T10/7005 Y02T10/7088 Y02T90/121 Y02T90/122 Y02T90/128 Y02T90/14 Y02T90/169 Y04S10/126 Y04S30/14 Y02T10/7072 G06Q10/06313 G06Q50/06 G06Q40/04 B60L11/1801 B60L11/1864 B60L11/1848 B60L8/003 B60L7/12 B60L11/1861 B60L2200/10 Y02T10/7094 B60L11/1842 G05B15/02 H02J3/00 H02J50/12 H02J50/40 H02J50/90 B60L11/182
European: B60L11/18L5 B60L11/18L7C2B G06F17/60B4 G06Q40/00 G06Q40/04 G06Q40/06 G06Q50/06 Y02T10/70B Y02T10/70J4 Y02T90/12 Y02T90/12D Y02T90/12H Y02T90/14
US: 1/1 307/104 320/107 320/108 320/108P 320/109 320/137 705/35 705/36.00R 705/36R 705/37 705/37P 705/7.23

PatBase - US2002046155_AA

Patent Application Publication Apr. 18, 2002 Sheet 1 of 2 US 2002/0046155 A1

**Family:**

Publication number	Publication date	Application number	Application date
EP2195716 A1	20100616	EP20080833499	20080926
IN01735CN2010 A	20100820	IN2010CN01735	20100326
US2002046155 AA	20020418	US20010939917	20010827
US2008319893 AA	20081225	US20080229706	20080826
US2010231163 AA	20100916	US20080679060	20080926
US2014197787 AA	20140717	US20140217252	20140317
US2015028807 AA	20150129	US20140512411	20141011
US2015035484 AA	20150205	US20140512413	20141011
US2015328998 AA	20151119	US20150808908	20150724
US2016005118 AA	20160107	US20150677714	20150402
US2016247240 AA	20160825	US20160019546	20160209
US2017136899 AA	20170518	US20160391434	20161227
US2017243304 AA	20170824	US20170430590	20170213
US2018029481 AA	20180201	US20170729312	20171010
US7945502 BB	20110517	US20010939917	20010827
US8890472 BB	20141118	US20080679060	20080926
US9090170 BB	20150728	US20140217252	20140317
US9256905 BB	20160209	US20080229706	20080826
US9569805 BB	20170214	US20160019546	20160209
US9697575 BB	20170704	US20150677714	20150402
US9783073 BB	20171010	US20150808908	20150724
WO09042214 A1	20090402	WO2008US11204	20080926

Priority:

US20000228275P	20000825	US20010939917	20010827	US20070015023P	20071219
US20080229706	20080826	US20080679060	20080926	US20070995396P	20070926
US20070998064P	20071005	US20080091460P	20080825	US20070967819P	20070907
US20140217252	20140317	US20100679060	20100319	US20130798240P	20130315
US20140512411	20141011	WO2008US11204	20080926	US20140512413	20141011
US20150808908	20150724	US20150677714	20150402	US20160019546	20160209
US20160391434	20161227	US20170430590	20170213	US20170729312	20171010

Probable Assignee: GRID INNOVATIONS LLC

Assignee(s): (std): CHI ENG K ; ENG CHI K ; GOVERNING DYNAMICS INVEST LLC ; GOVERNING DYNAMICS INVESTMENT LLC ; GOVERNING DYNAMICS LLC ; MASHINSKY ALEX ; MASHINSKY DAVID ; MASHINSKY RENA ; PARADIGM SHIFTING SOLUTIONS ; GRID INNOVATIONS LLC ; AIP ACQUISITION LLC ; MASHINSKY DAVID

Assignee(s): ARBINET THEXCHANGE INC ; PARADIGM SHIFTING SOLUTIONS LLC ; ORIX USA CORP

Inventor(s): (std): MASHINSKY DAVID ; MASHINSKY RENA ; MASHINSKY DAVID ; MASHINSKY ALEX ; ENG CHI K ; CHI ENG K

Agent(s): LLOYD PATRICK ALEXANDER DESMOND; COHEN PONTANI LIEBERMAN AND PAVANE LLP; CHI; THOMAS J; EDWARD F; BARNES AND THORNBURG LLP; DILWORTH PAXSON LLP; WEISZ EDWARD 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: HEAT PUMP **SYSTEM** WITH HIGH EFFICIENCY REVERSIBLE HELICAL SCREW ROTARY COMPRESSOR

Abstract: Source: US4058988A [EN] A helical screw rotary compressor is provided with oppositely oriented slide valves at the suction and discharge sides of the machine to control compressor capacity and balance the closed thread pressure at discharge with discharge line pressure in a main closed loop heat pump refrigeration **system**. The compressor may be bidirectional if the function of the slide valves is reversed. Additional slide valves carried by the compressor may be employed to vary the injection point of intermediate pressure refrigerant gas to a compressor closed thread and to control flow to and/or from closed threads and a secondary loop for subcooling the main loop refrigerant or for other functions.

Classifications:

International (IPC 8-9): F01K25/08 F01K7/34 F04C18/16 F04C28/00 F04C28/12 F24D11/00 F24D11/02 F24F3/00 F24J2/42 F24S90/00 F25B1/00 F25B1/047 F25B1/10 F25B13/00 F25B27/00 F25B29/00 F25B30/02 F25B49/02 (Advanced/Invention); F04C18/16 F25B30/06 (Advanced/Non-invention); F04C18/16 F04C28/00 F24D11/00 F24F3/00 F24J2/42 F25B1/00 F25B1/04 F25B1/10 F25B13/00 F25B27/00 F25B29/00 F25B30/00 (Core/Invention); F04C18/16 (Core/Non-invention)

International (IPC 1-7): F01K7/34 F04C18/16 F04C29/08 F04C29/10 F04D F24D11/02 F24F5/00 F24J3/02 F24J3/04 F25B1/00 F25B1/04 F25B1/10 F25B13/00 F25B27/00 F25B27/02 F25B29/00 F25B41/04 F25B49/00 F25B7/00 G05D23/00

CPC: F25B1/10 F25B30/06 F25B2313/025 F25B2313/0292

F25B2313/0293 F25B2313/0294 F25B2313/0314 F25B2313/0315

F25B2400/074 F25B2400/24 F25B2600/02 F25B2600/2501

F25B2600/2509 F25B2700/2111 F25B1/00 F25B49/022 F25B2500/26

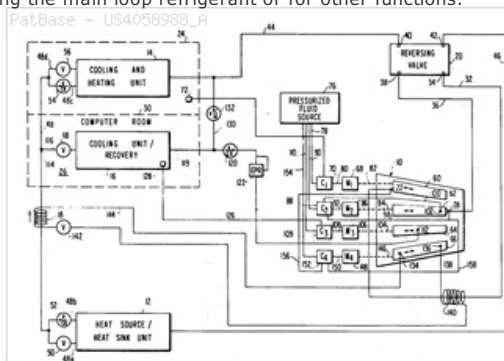
F25B2600/026 F01K7/34 F01K25/08 F24F3/001 F24D11/003 F24D11/0264 F25B29/003 Y02A30/62 F04C28/125 F04C18/16

F24D11/0214 F24D11/0221 F25B1/047 F25B13/00 F25B30/02 F25B2313/023 F25B2313/02791 F25B2400/051 F25B2400/13

Y02B10/20 Y02B10/70 Y02B30/126

European: F01K25/08 F01K7/34 F04C18/16 F04C28/12B F04C29/10B4B4 F24D11/00C2 F24D11/02C F24D11/02C2 F24D11/02D2 F24F3/00B2 F25B1/00 F25B1/047 F25B1/10 F25B13/00 F25B29/00B F25B30/02 F25B49/02B R04C18/16 R25B30/06 R25B313/023 R25B313/025 R25B313/02791 R25B313/0292 R25B313/0293 R25B313/0294 R25B313/0314 R25B313/0315 R25B400/051 R25B400/074 R25B400/13 R25B400/24 R25B500/26 R25B600/02 R25B600/026 R25B600/2501 R25B600/2509 R25B700/2111 Y02B10/20 Y02B10/24 Y02B10/40 Y02B10/70 Y02B30/12B Y02B30/12B2 Y02B30/52

US: 126/613 126/629 237/2.00B 237/2B 290/52 417/310 418/201.2 60/678 62/160 62/175 62/196.2 62/196.4 62/2 62/235.1 62/238.6 62/324 62/324.1 62/324.6 62/503 62/505 62/510 62/513



Family:

Publication number	Publication date	Application number	Application date
AU197721740 A1	19780803	AU19770021740	19770127
AU197730784 A1	19790524	AU19770030784	19771118
AU197836832 A1	19791206	AU19780036832	19780602
AU500607 B2	19790524	AU19770021740	19770127
AU508539 B2	19800327	AU19770030784	19771118
BR7700522 A	19771004	BR19770000522	19770128
BR7707726 A	19780926	BR19770007726	19771121
BR7803807 A	19790116	BR19780003807	19780614
CA1040445 A1	19781017	CA19770269386	19770110
CA1057966 A1	19790710	CA19770289370	19771024
CA1057967 A1	19790710	CA19790319937	19790119
CA1057967 A2	19790710	CA19790319937	19790119
CA1070968 A1	19800205	CA19780304158	19780526
DE2702230 A1	19770804	DE19772702230	19770120
DE2751003 A1	19781012	DE19772751003	19771115
DE2825076 A1	19790208	DE19782825076	19780608
FR2339822 A1	19770826	FR19770002430	19770128
FR2353816 A1	19771230	FR19770027307	19770909
FR2385999 A1	19781027	FR19770034943	19771121
FR2385999 B1	19840120	FR19770034943	19771121
FR2410233 A1	19790622	FR19780017739	19780614
FR2449858 A1	19800919	FR19790001968	19790125
GB1571528 A	19800716	GB19770002048	19770119
GB1593521 A	19810715	GB19770045660	19771102
GB1600760 A	19811021	GB19780024699	19780531
JP52095356 A2	19770810	JP19770007923	19770128
JP53122162 A2	19781025	JP19770139021	19771121
JP54016759 A2	19790207	JP19780072000	19780614
MX142962 A	19810126	MX19770167872	19770128
SE434778 B	19840813	SE19770013082	19771121
SE434778 C	19841122	SE19770013082	19771121
SE7700668 A	19770730	SE19770000668D	19770121
SE7700668 L	19770730	SE19770000668	19770121
SE7713082 A	19781001	SE19770013082	19771121
US4058988 A	19771122	US19760653568	19760129
US4086072 A	19780425	US19770782675	19770330
US4148436 A	19790410	US19770806407	19770614
US4185465 A	19800129	US19780881449	19780227
US4196595 A	19800408	US19780924015	19780711
US4197719 A	19800415	US19780882729	19780302
US4209996 A	19800701	US19780950905	19781012
US4242872 A	19810106	US19780970789	19781218
US4245476 A	19810120	US19790000604	19790102
ZA7700332 A	19771228	ZA19770000332	19770120

Priority:

CA19770289370 19771024	CA19790319937 19790119	FR19780017739 19780614
US19760653586 19760129	US19760653568 19760129	US19770782675 19770330
US19780970789 19781218	US19780882729 19780302	US19780881449 19780227
US19780924015 19780711	US19780950905 19781012	US19790000604 19790102
US19770806407 19770614		

Probable Assignee: CITIZENS BANK NEW HAMPSHIRE

Assignee(s): (std): DUNHAN BUSH ; DUNHAM BUSH INC

Assignee(s): FLEET BANK NATIONAL ASSOCIATION ; DUNHAM BUSH INT ; DUNHAM BUSH ; DUNHAM BUSH INT
CAYMAN LTD ; HYDROTHERM ROCKLAND AVENUE NORTHVALE NJ 07647 A CO ; MARSHALL IND ;
MARSHALL IND INC ; SHAW DAVID N ; HYDROTHERM A CORP ; DUNHAM BUSH INT (CAYMAN) LTD ;
HYDROTHERM A CORP OF DE ; BT COMMERCIAL CORP ; CITIZENS BANK NEW HAMPSHIRE ;
CONNECTICUT BANK AND TRUST CO ; CONNECTICUT BANK AND TRUST CO NA A CORP OF DE ;
DUNHAM BUSCH INC

Inventor(s): (std): DEIBUITSUDO NOOTON SHIYOO ; SHAW DAVID NORTON ; SHAW D N ; DEBITSUTO NOOTON SHIYOO ;
DABUITSUDO NOOTON SHIYOO ; SHAW DAVID N ; SHAW D

Inventor(s): DAVID NORTON SHAW ; NORTON SHAW DAVID ; DN SHAW ; D N SHAW

Title: SENSOR ASSEMBLIES

Abstract: Source: US200519272/A [EN] Sensor assembly capable of obtaining and providing a measurement of a physical quantity, e.g., measurement of temperature and/or pressure of a vehicular tire, includes an antenna capable of receiving a radio frequency signal, a radio frequency identification (RFID) device coupled to the antenna, a sensor coupled to the RFID device arranged to generate a measurement of the physical quantity or quantities, and a switch coupled to the RFID device and arranged to connect or disconnect the sensor from a circuit with the antenna dependent on whether the antenna receives a particular signal associated with the RFID device. When the antenna receives the particular signal associated with the RFID device, the RFID device causes the switch to close and connect the sensor in the circuit with the antenna to enable the measurement generated by the sensor to be directed to and transmitted by the antenna.

Classifications:

International (IPC 8-9): B60C11/24 B60C19/00 B60C23/04
B60C23/06 B60J10/00 B60N2/00 B60R21/01 B60R21/16 B60R21/20
B60R21/213 B60R21/231 B60R21/232 B60R21/235 B60R21/30
G01F23/00 G01F23/20 G01F23/26 G01F23/296 G01F23/36
G02B27/01 G07C5/00 G07C5/08 H01Q1/22 (Advanced/Invention);
B60R21/00 G02B27/00 (Advanced/Non-invention);
B60C11/24 B60C19/00 B60C23/02 B60C23/06 B60J10/00 B60N2/00
B60R21/01 B60R21/16 B60R21/20 B60R21/23 B60R21/30 G01F23/00
G01F23/22 G01F23/296 G01F23/30 G02B27/01 G07C5/00
H01Q1/22 (Core/Invention);
B60R21/00 G02B27/00 (Core/Non-invention)

International (IPC 1-7): G06F7/00

CPC: B60N2002/272 B60R21/0136 B60C11/24 B60C19/00
B60C23/041 B60C23/0411 B60C23/4449 B60C23/12 B60J10/00
B60N2/002 B60R21/20 B60R21/213 B60R21/232 B60R21/233
B60R21/235 B60R21/30 B60R2021/0004 B60R2021/23107
B60R2021/23153 B60R2021/23161 B60R2021/23169
B60R2021/23519 B60R2021/23523 B60R2021/23557 B60R2021/2358
B60R2021/2359 G02B27/01 G02B2027/014 G02B2027/0187
G06K7/10178 G07C5/008 G07C5/0808 H01Q1/22 H01Q1/2241

European: B60C11/24 B60C19/00 B60C23/04C3 B60C23/04C3A B60C23/04C6D2B B60C23/12 B60J10/00 B60N2/00C
B60R21/0136 B60R21/16B2B B60R21/16B2V B60R21/16B4 B60R21/20 B60R21/20K B60R21/21 B60R21/232 B60R21/233
B60R21/235 B60R21/30 G01F23/00G1A G01F23/20 G01F23/26B G01F23/296D G01F23/36 G02B27/01 G06K7/10A3C
G07C5/00T G07C5/08D H01Q1/22 H01Q1/22C8 L60R21/00A1 L60R21/231C L60R21/231M L60R21/231N L60R21/231P
L60R21/235M3 L60R21/235M5 L60R21/235P6 L60R21/235S4 L60R21/235S6 S02B27/01A11 S02B27/01D4

US: 701/1 701/1S 701/37 701/37P

Family:

Publication number	Publication date	Application number	Application date
US2005192727 AA	20050901	US20050120065	20050502

Priority:

US19940239977	19940509	US19950476077	19950607	US19950571247	19951212
US19950550217	19951030	US19970819609	19970317	US19960028046P	19961009
US19980137918	19980820	US19980073403	19980506	US19990356314	19990716
US19970947661	19971009	US20000645709	20000824	US20000231378P	20000908
US20010269415P	20010216	US19990170973P	19991215	US20020188673	20020703
US20010753186	20010102	US20020174709	20020619	US20020330938	20021227
US20030613453	20030703	US20010925062	20010808	US20010767020	20010123
US20010765558	20010119	US20020079065	20020219	US20030638743	20030811
US20020043557	20020111	US20020473613P	20021104	US20030461648P	20030408
US20010291511P	20010516	US20010304013P	20010709	US20020415862P	20021003
US20050120065	20050502	US20050082739	20050317	US20030701361	20031104
US20030642028	20030815	US20050039129	20050119	US20030658750	20030909
US20040592838P	20040730				

Probable Assignee: AUTOMOTIVE TECHNOLOGIES INT INC

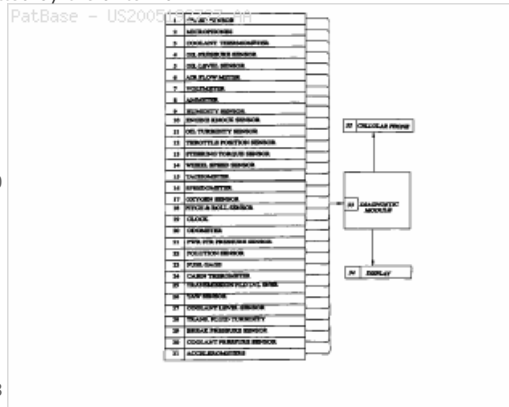
Assignee(s): (std): AUTOMOTIVE TECH INT

Assignee(s): AUTOMOTIVE TECHNOLOGIES INT ; AUTOMOTIVE TECHNOLOGIES INT INC ; AUTOMOTIVE TECHNOLOGIES INTERNATIONAL INC

Inventor(s): (std) BREED DAVID S ; DUVALL WILBUR E ; JOHNSON WENDELL C ; KOLOMEYKO ANATOLIY V ; SHOSTAK OLEKSANDR T

Inventor(s): SHOSTAK OLEKSANDR ; KOLOMEYKO ANATOLIY ; JOHNSON WENDELL ; DUVALL WILBUR ; BREED DAVID

Agent(s): BRIAN ROFFE ESQ



Title: CLEANING **DEVICE** FOR SUNLIGHT COLLECTING **DEVICES** IN A **SOLAR** THERMAL **ELECTRIC POWER GENERATION SYSTEM**

Abstract: Source: US2011126378A [EN] A **device** for cleaning a collector of a **solar** thermal **electric power generation system** is provided which does not need to secure any water source or the like and which improves the flexibility of selection of a place for installing the **solar** thermal **electric power generation system**. The cleaning **device** includes an air supply **device** and an air nozzle configured to blow air supplied from the air supply **device**, which are mounted on a self-propelled truck. The cleaning **device** is capable of blowing air blown from the air nozzle against a sunlight reflecting surface of a collector to clean up the sunlight reflecting surface. The air nozzle is configured to be capable of moving up and down. The cleaning **device** further includes a soiling degree measuring **device** for measuring soiling degrees of the sunlight reflecting surface before and after air blowing by the air nozzle.

Classifications:

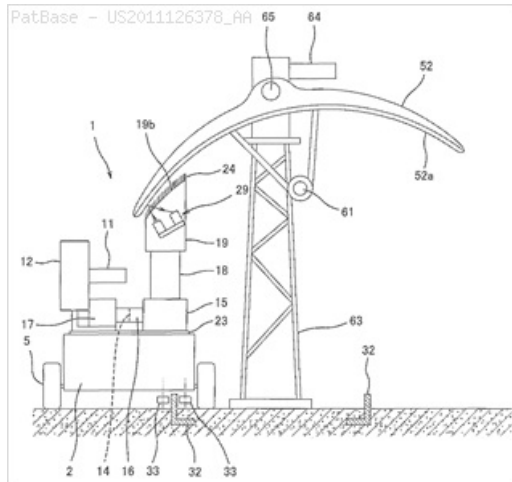
International (IPC 8-9): A47L5/00 B08B1/00 B08B5/00 B08B5/02 F24J F24J2/14 F24J2/46 (Advanced/Invention); B08B1/00 B08B5/00 B08B5/02 F24J2/00 F24J2/06 (Core/Invention); F24J (Subclass/Invention)

International (IPC 1-7): B08B5/02 F24J2/14 F24J2/46

CPC: Y02E10/40 B08B5/02 F24J2/1047 F24J2/40 F24J2/461

European: B08B5/02 F24J2/10B F24J2/46B10

US: 15/312.1 15/319 15/320 15/340.3 15/367 15/368 15/405 15/405P



Family:

Publication number	Publication date	Application number	Application date
EP2330363 A1	20110608	EP20090811203	20090114
EP2330363 A4	20140910	EP20090811203	20090114
IL207318 A0	20101230	IL20090207318	20090114
JP2010058058 A2	20100318	JP20080226812	20080904
JP5192946 B2	20130508	JP20080226812	20080904
MA31937 B1	20101201	MA20100032951	20100625
US2011126378 AA	20110602	US20090055133	20090114
US2012036676 A9	20120216	US20090055133	20090114
US8689393 BB	20140408	US20090055133	20090114
WO10026673 A1	20100311	WO2009JP00099	20090114

Priority:

JP20080226812 20080904 WO2009JP00099 20090114

Probable Assignee: KAWASAKI JUKOGYO KK

Assignee(s): (std): KAWASAKI HEAVY IND LTD ; KAWASAKI PLANT SYSTEMS KABUSHI ; KAWASAKI PLANT SYSTEMS KABUSHIKI KAISHA ; KAWASAKI PLANT SYSTEMS KK ; OTA HIDEAKI ; KAWASAKI PLANT SYSTEMS LTD

Assignee(s): KAWASAKI JUKOGYO KK ; KAWASAKI JUKOGYO KABUSHIKI KAISHA

Inventor(s): (std): OTA HIDEAKI

Agent(s): LEINWEBER AND ZIMMERMANN; ALLEMAN HALL MCCOY RUSSELL AND TUTTLE LLP; PATENT CORPORATE BODY ARCO PATENT OFFICE

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 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: UNCOUPLED, THERMAL-COMPRESSOR, GAS-TURBINE ENGINE

Abstract: Source: US2004083731A [EN] The invention is for a continuous-combustion, closed-cycle, gas turbine engine with a regenerator and a displacer. It has embodiments that remove heater and cooler interior volumes during gas compression, which enable it to scale well to very large sizes. Low combustion temperatures insure very low emissions. The displacer levitated by an integral gas bearing and small clearance seal and given oscillatory translational motion by electromagnetic forces operates without surface wear. The turbine blades, subjected only to warm gases, are durable and inexpensive. Thus, this engine has a very long, continuous, maintenance-free service life. This gas turbine engine also operates without back work allowing high efficiency for both low and rated output. Pressurized encapsulation permits use of low-cost ceramics for high temperature components. The invention includes a unique monolithic ceramic heater, a compact high-capacity regenerator and a constant-power gas turbine.

Classifications:

International (IPC 8-9): F01K13/00 F02C1/04 F02C1/05 F02C6/00 F02C9/00 F02G1/04 F03G6/06 F24J2/07 F24S20/20 F28F21/04 F28F3/08 (Advanced/Invention); F02C1/00 F02C6/00 F02G1/00 F03G6/00 F24J2/06 F28F21/00 F28F3/08 (Core/Invention)

International (IPC 1-7): F01B29/10 F01K13/00 F02G1/04

CPC: F02C1/04 F02C1/05 F02C6/00 F02G1/04 F03G6/06 F03G6/06S F24J2/07 F28F21/04 F28F3/08C Y02E10/41 Y02E10/46 Y02E20/14 Y02T50/672

European: F02C1/04 F02C1/05 F02C6/00 F02G1/04 F03G6/06G F03G6/06S F24J2/07 F28F21/04 F28F3/08C Y02E10/41 Y02E10/46 Y02E20/14 Y02T50/67B2

US: 415/65 415/68 415/77 60/39.24 60/39.240P 60/517 60/520 60/526 60/645 60/645P 60/677

PatBase - US2004083731_AA

Patent Application Publication May 6, 2004 Sheet 1 of 45 US 2004/0083731 A1

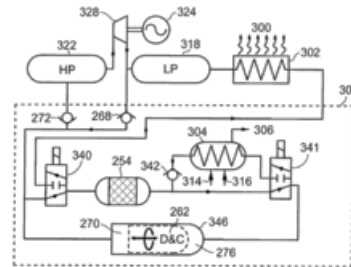
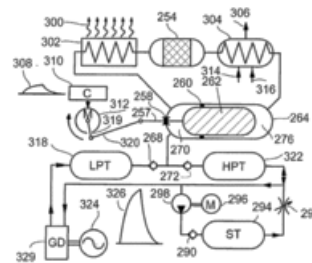


Fig. 1



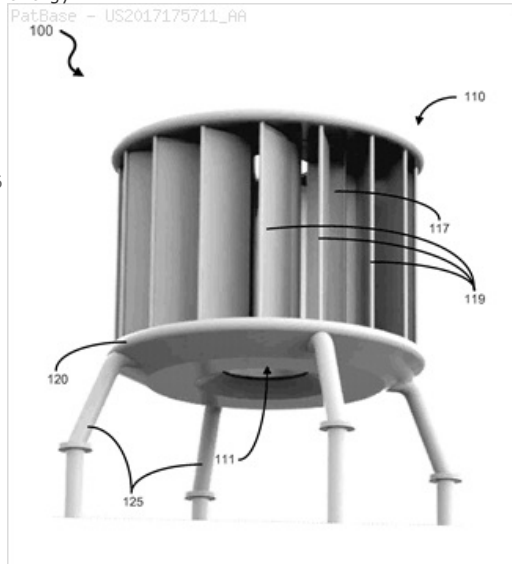
Title: DIRECT WIND ENERGY GENERATION

Abstract: Source: US2017175711A [EN] Methods, **systems**, and **devices** are disclosed for wind power generation. In one aspect, a wind power generator includes a support base; inductors positioned over the support base in a circular array; an annulus ring track fixed to the base support and providing a circular track around which the inductors are located; an annulus ring rotor placed on the annulus ring track and engaged to rollers in the circular track so that the annulus ring rotor can rotate relative to the an annulus ring track, in which the annulus ring rotor include separate magnets to move through the circular array of inductors to cause generation of electric currents; and a wind rotor assembly coupled to the annulus ring rotor and including wind-deflecting blades that rotate with the rotor and a hollow central interior for containing a wind vortex formed from deflecting wind by the blades to convert into the electric energy.

Classifications:

International (IPC 8-9): F03D13/20 F03D3/00 F03D3/06 F03D7/06 F03D9/25 H02K1/14 H02K1/27 H02K21/12 H02K21/24 H02K3/18 H02K3/28 H02K41/03 H02K7/08 H02K7/18 (Advanced/Invention); H02K11/04 H02K3/28 (Advanced/Non-invention)

CPC: H02K7/088 H02K7/1869 F05B2240/9112 Y02B10/30 Y02E10/725 Y02E10/728 F03D3/005 F03D13/20 F03D3/061 H02K7/085 F05B2240/211 F05B2240/301 F05B2240/50 F03D9/25 F03D7/06 H02K1/141 H02K3/18 H02K7/183 H02K21/24 H02K2213/06 H02K3/28 H02K11/046 H02K41/03 H02K2201/15 H02K2205/03 H02K2213/12 Y02E10/721 H02K2213/03

**Family:**

Publication number	Publication date	Application number	Application date
AU2015289392 AA	20160121	AU20150289392	20150720
AU2015289392 BB	20171221	AU20150289392	20150720
CA2955047 AA	20170112	CA20152955047	20150720
CN107078615 A	20170818	CN201580050011	20150720
EP3170247 A1	20170524	EP20150821442	20150720
EP3170247 A4	20171011	EP20150821442	20150720
US2017175711 AA	20170622	US20150327307	20150720
US9803623 BB	20171031	US20150327307	20150720
WO16011454 A1	20160121	WO2015US41204	20150720

Priority:

US20140026561P 20140718 US20150327307 20150720 WO2015US41204 20150720

Probable Assignee: EIP TECHNOLOGIES INC

Assignee(s): (std): EIP TECH INC ; EIP TECHNOLOGIES INC

Assignee(s): BURKLE STEVE

Inventor(s): (std): BURKLE STEVE

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; SMART AND BIGGAR; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; PERKINS COIE LLP; AI BING

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 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

Title: CHARGING **DEVICE**, ELECTRIC VEHICLE EQUIPPED WITH THE CHARGING **DEVICE** AND CHARGING CONTROL METHOD

Abstract: Source: US2009096416A [EN] An HV-ECU acquires electric power information from an electricity transmission line by using a modem. The electric power information includes information regarding the amount of carbon dioxide having been emitted in the generating process of the commercial electric power supplied from an electricity transmission line. When the CO₂ emission amount is below a pre-set CO₂ emission amount, the HV-ECU inputs the commercial electric power, and outputs a command to charge an electricity storage **device** to a motive power output **device**, so that the motive power output **device** executes a charging control of the electricity storage **device**.

Classifications:

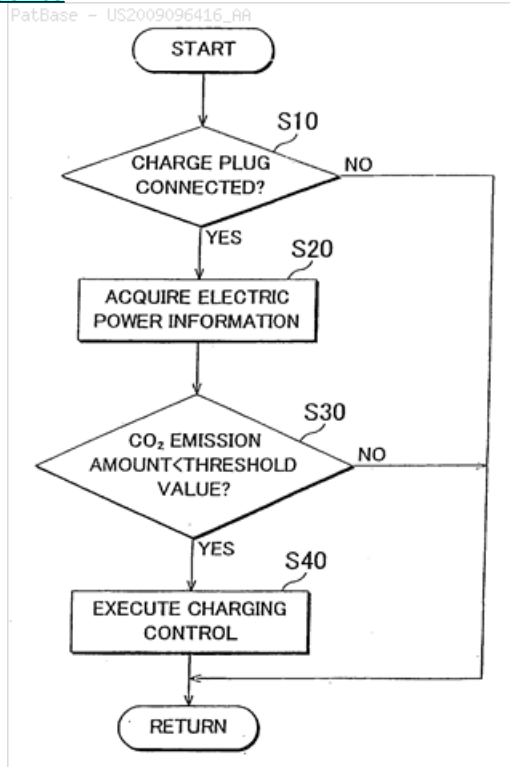
International (IPC 8-9): B60L11/14 B60L11/18 H01M10/44 H01M10/46 H02J13/00 H02J7/00 H02J7/04

H02J7/10 (Advanced/Invention);
B60L11/14 B60L11/18 H02J13/00 H02J7/00 H02J7/04
H02J7/10 (Core/Invention)

CPC: Y02T10/6239 B60K1/02 B60K6/365 B60K6/445 B60L11/123 B60L11/14 B60L11/1812 B60L11/1814 B60L11/1816 B60L11/1824 B60L11/184 B60L11/1846 B60L11/1848 B60L15/007 B60L2220/54 B60L2230/16 B60L2240/62 B60W10/06 B60W10/08 B60W10/26 B60W20/00 B60W2510/244 B60W2550/402 Y02T10/6217 Y02T10/6269 Y02T10/6286 Y02T10/641 Y02T10/7005 Y02T10/7077 Y02T10/7088 Y02T10/7291 Y02T90/121 Y02T90/127 Y02T90/128 Y02T90/14 Y02T90/16 Y02T90/162 Y02T90/163 Y02T90/169 Y04S30/14 Y02T10/645 B60W20/15 B60W10/24 B60W10/28 H02J7/042

European: B60K6/365 B60K6/445 B60L11/12D B60L11/14 B60L11/18L2A B60L11/18L2C B60L11/18L4 B60L11/18L7 B60L11/18L7J B60L11/18L7J10 B60L11/18L7J2 B60L11/18L7J8 B60L15/00D B60W10/06 B60W10/08 B60W10/26 B60W20/00 H02J7/04C L60K1/02 L60L220/54 L60L230/16 L60L240/62 L60W510/24A2 L60W550/40A Y02T10/62F12 Y02T10/62F2 Y02T10/62J Y02T10/64B Y02T10/70B Y02T10/70D Y02T10/70J2 Y02T10/70J4 Y02T10/72D8 Y02T90/12B Y02T90/12J Y02T90/12L Y02T90/14 Y02T90/16 Y02T90/16B2 Y02T90/16D Y02T90/16F4 Y04S30/14

US: 320/107 320/107S 320/109 320/109P



Family:

Publication number	Publication date	Application number	Application date
CN101326076 A	20081217	CN200680045940	20061205
CN101326076 B	20110831	CN200680045940	20061205
DE602006014439 D1	20100701	DE200660014439T	20061205
EP1957312 A2	20080820	EP20060831642	20061205
EP1957312 B1	20100519	EP20060831642	20061205
JP2007185083 A2	20070719	JP20060300674	20061106
JP5078119 B2	20121121	JP20060300674	20061106
US2009096416 AA	20090416	US20060085666	20061205
US8063605 BB	20111122	US20060085666	20061205
WO07066198 A2	20070614	WO2006IB03470	20061205
WO07066198 A3	20080124	WO2006IB03470	20061205

Priority:

JP20050351896 20051206 JP20060300674 20061106 WO2006IB03470 20061205

Probable Assignee: TOYOTA JIDOSHA KK

Assignee(s): (std): FUJITAKE YOSHINORI ; ICHISHI MASATO ; ISHIKAWA TETSUHIRO ; NAKAMURA MAKOTO ; OYUBE HICHIROSAI ; TOYOTA MOTOR CO LTD ; TONEGAWA HIROMI ; OYUBE HISHIROSAI ; TOYOTA MOTOR CORP

Assignee(s): TOYOTA MOTOR CO ; TOYOTA JIDOSHA KK

Inventor(s): (std): FUJITAKE YOSHITOKU ; ISSHI MASAHIRO ; OYUBE HICHIROSAI ; YOSHINORI FUJITAKE ; TONEGAWA HIROMI ; TETSUHIRO ISHIKAWA ; OYUBE HISHIROSAI ; NAKAMURA MAKOTO ; MASATO ICHISHI ; MAKOTO NAKAMURA ; ISHIKAWA TETSUHIRO ; ICHISHI MASATO ; HISHIROSAI OYUBE ; HIROMI TONEGAWA ; FUJITAKE YOSHINORI

Agent(s): TBK PATENT; MUTOH TADASHI; FUKAMI PATENT OFFICE PC; MORITA TOSHIO; FUKAMI HISAO; OLIFF AND BERRIDGE PLC

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 GT GW HN HR HU ID IE IL IN IS IT KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR 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

Title: ALL HAZARD RESIDENTIAL WARNING **SYSTEM**

Abstract: Source: US2007194906A [EN] A networked **system** of addressable alarms notifies citizens of conditions within a community. A control center is communicably linked via the network to alarm **devices** such as smoke detectors in controlled environments such as buildings in order to alert citizens of conditions outside of the controlled environment, which may be situations requiring an emergency response. The alarm **devices** may also be capable of sending local status information (e.g., fire alarms, security alarms, etc.) to the control center so that the control center can respond as necessary to any local emergencies.

Classifications:

International (IPC 8-9): A61F2/30 B60Q1/00 B60Q1/26 B60Q1/52 F21S10/06 F21S8/10 F21V19/00 F21V23/04 G06F13/14 G06F15/173 G08B1/08 G08B21/00 G08B29/00 G08B5/00 G08B5/22 H04B17/00 H04B7/00 H04J1/16 H04J3/16 H04L12/24 H04L12/26 H04L12/28 H04L12/42 H04M11/04 H04Q7/00 H04Q7/20 H04Q7/24 H04W16/00 H04W4/00 H04W4/22 H04W4/90 H05B37/00

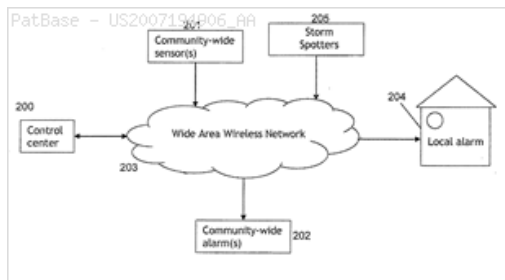
H05K13/00 (Advanced/Invention); B60Q1/00 B60Q1/26 G06F13/14 G06F15/16 G08B1/00 G08B29/00 G08B5/00 G08B5/22 H04B17/00 H04B7/00 H04J1/00 H04J3/16 H04L12/26 H04L12/42 H04M11/04 H04Q7/00 H04Q7/24 H04W16/00 H04W4/00 (Core/Invention)

CPC: G08B17/10 G08B25/007 G08B25/009 G08B25/10 G08B27/001

G08B27/006 H04W16/00 G08B27/003 H04L41/06 B60Q1/52 H04L41/22 B60Q1/2611 F21V23/04 Y10T29/49002 Y10T29/49826 H04L41/00 F21S41/00

European: B60Q1/26D F21S48/10 F21V23/04 G08B17/10 G08B25/00N G08B25/00S G08B25/10 G08B27/00E G08B27/00H G08B27/00P H04L12/24 H04L41/00 H04W16/00 T04L12/24A7 T04L12/24D T04L12/24F3 T04L41/06 T04L41/22 Y04S40/16F

US: 29/428 29/592.1 29/592.100S 315/77 315/77P 340/293 340/426.23 340/468 340/468S 340/471 340/506 340/506P 340/531 340/539.25 340/6.1 340/691.1 340/815.4 340/815.400S 340/815.73 340/825.36 345/520 362/493 362/493P 362/493S 362/499 362/542 362/543 362/544 362/646 370/245 370/250 370/250P 370/338 370/463 379/37 379/37P 455/404.1 455/524 455/524P 455/67.7 701/36 709/223

**Family:**

Publication number	Publication date	Application number	Application date
CA2648123 AA	20080930	CA20072648123	20070315
CA2648123 C	20160105	CA20072648123	20070315
EP2019763 A2	20090204	EP20070758625	20070315
EP2019763 A4	20120104	EP20070758625	20070315
EP2019763 B1	20170705	EP20070758625	20070315
ES2637915 T3	20171017	ES20070758625T	20070315
MX2008012447 A1	20090206	MX20080012447	20070315
US2007194906 AA	20070823	US20060558802	20061110
US2007195706 AA	20070823	US20060505642	20060817
US2007195939 AA	20070823	US20060548209	20061010
US2007211866 AA	20070913	US20070677481	20070221
US2007213088 AA	20070913	US20070677486	20070221
US2007242472 AA	20071018	US20060394752	20060331
US2009141511 AA	20090604	US20090350506	20090108
US2011156589 AA	20110630	US20110040834	20110304
US2014125476 AA	20140508	US20140154771	20140114
US7476013 BB	20090113	US20060394752	20060331
US7746794 BB	20100629	US20060505642	20060817
US7905640 BB	20110315	US20090350506	20090108
US8636395 BB	20140128	US20110040834	20110304
US9002313 BB	20150407	US20060548209	20061010
US9550453 BB	20170124	US20140154771	20140114
WO07103629 A2	20070913	WO2007US62439	20070220
WO07103629 A3	20081106	WO2007US62439	20070220
WO07117770 A2	20071018	WO2007US62509	20070221
WO07117770 A3	20080612	WO2007US62509	20070221
WO07117854 A2	20071018	WO2007US64088	20070315
WO07117854 A3	20080410	WO2007US64088	20070315
WO07117854 B1	20080612	WO2007US64088	20070315
WO07120985 A2	20071025	WO2007US62507	20070221
WO07120985 A3	20080612	WO2007US62507	20070221
WO07133829 A2	20071122	WO2007US62442	20070220
WO07133829 A3	20080403	WO2007US62442	20070220
WO07136899 A2	20071129	WO2007US62444	20070220
WO07136899 A3	20080724	WO2007US62444	20070220

Priority:

EP20070758625	20070315	US20060394752	20060331	US20060548209	20061010
US20060558802	20061110	US20060775634P	20060222	US20060505642	20060817
US20070677481	20070221	US20070677486	20070221	WO2007US64088	20070315
US20090350506	20090108	US20110040834	20110304	US20140154771	20140114

Probable Assignee: FEDERAL SIGNAL CORP

Assignee(s): (std): GERGETS PAUL M ; FLESZEWSKI VINCE S ; SINK GREGORY A ; MOSTELLO ALLAN J ; FED SIGNAL CORP

Assignee(s): FEDERAL MERGER CORP ; FEDERAL SIGNAL CORP ; BANK OF MONTREAL COLLATERAL AGENT AS ; ELGIN SWEEPER CO ; SONY CORP ; TPG SPECIALTY LENDING INC COLLATERAL AGENT AS ; WELLS FARGO CAPITAL FINANCE LLC AGENT AS ; WELLS FARGO BANK NATIONAL ASSOCIATION ADMINISTRATOR AS ; JETSTREAM OF HOUSTON LLP ; VACTOR MFG INC ; WELLS FARGO BANK NATIONAL ASSOCIATION ADMINISTRATIVE AGENT AS ; JETSTREAM OF HOUSTON INC ; WELLS FARGO BANK NATIONAL ASSOCIATION AS ADMINISTRATIVE AGENT ; FST OF CALIFORNIA LLC ; FST OF MICHIGAN ; FST OF TENNESSEE INC ; GUZZLER MFG INC ; FEDERAL SIGNAL CREDIT CORP ; FEDERAL SIGNAL OF TEXAS

CORP ; FS DEPOT INC ; FS SUB LLC

Inventor(s): (std): FLESZEWSKI VINCE S ; GERGETS PAUL M ; MOSTELLO ALLAN J ; SINK GREGORY A

Inventor(s): VINCE S FLESZEWSKI ; PAUL M GERGETS ; SINK GREGORY ; MOSTELLO ALLAN ; GERGETS PAUL ; ALLAN J MOSTELLO ; FLESZEWSKI VINCE

Agent(s): MARKS AND CLERK; GILL STEPHEN CHARLES ET AL; GILL STEPHEN CHARLES; VALLEJO JUAN PEDRO; LEYDIG VOIT AND MAYER LTD

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 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

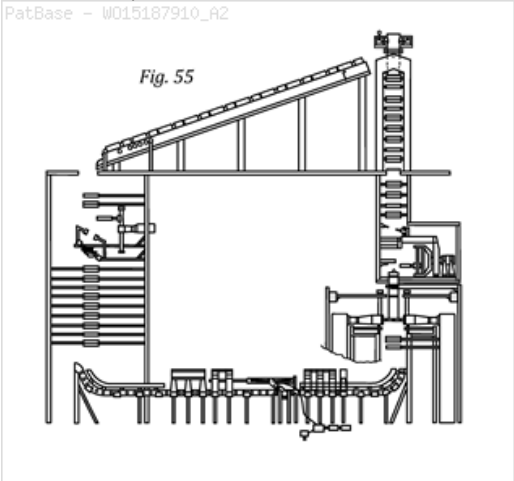
Title: MAGNAFLOAT **DEVICE** GENERATING CLEAN ELECTRICITY BY USING GRAVITY, BUOYANCY, **SPEED** MANIPULATION PROCEDURES AND BY PASSING MAGNETS THROUGH INDUCTORS

Abstract: The MagnaFloat, an energy generation **device** using gravity, buoyancy, pressure differentials, **speed** controls and linear **motors** to control the movement of buoyant canisters over and through a series of open, non-restricted pathways. Each canister has a magnet inside. While moving downward through Air (Drop Phase), ascending through Fluid (Floatation-ascent Phase), and upward through Air, these magnet-canisters pass through permanently attached inductors and electricity is produced. At conclusion of Floatation-ascent Phase, canisters exit Fluid and continue moving upward through Air into Pivot Bucket; Pivot Bucket is then rotated and canisters are ejected onto Inclined Platform. At bottom of overall **device** Passive Roller **System** changes direction of travel for canisters from downward vertical motion in horizontal motion, then later to upward vertical motion. While traveling horizontally, kinetic energy is extracted from fast moving canisters by acquiring and storing increased hydraulic pressure, which is converted into electricity.

Classifications:

International (IPC 8-9): F03B17/02 H02K7/18 (Advanced/Invention)

CPC: F03B17/04 F05B2220/7068 F05B2220/707



Family:

Publication number	Publication date	Application number	Application date
WO15187910 A2	20151210	WO2015US34115	20150604

Priority:

US20140295472 20140604

Probable Assignee: MOOSE ROBERT D

Assignee(s): (std): MOOSE ROBERT D

Inventor(s): MOOSE ROBERT D

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 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 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

Title: ACTIVE THERMAL ENERGY STORAGE **SYSTEM**

Abstract: Source: US2008092875A [EN] An active thermal energy storage **system** is disclosed which uses an energy storage material that is stable at atmospheric pressure and temperature and has a melting point higher than 32 degrees F. This energy storage material is held within a storage tank and used as an energy storage source, from which a heat transfer **system** (e.g., a heat pump) can draw to provide heating of residential or commercial buildings and associated hot water. The energy storage material may also accept waste heat from a conventional air conditioning loop, and may store such heat until needed. The **system** may be supplemented by a **solar** panel **system** that can be used to collect energy during daylight hours, storing the collected energy in the energy storage material. The stored energy may then be used during the evening hours to heat recirculation air for a building in which the **system** is installed.

Classifications:

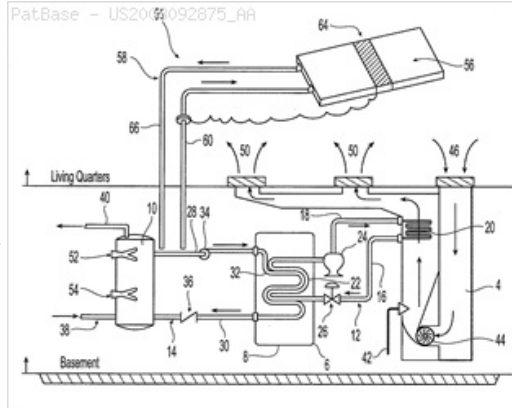
International (IPC 8-9): F24F5/00 F24H7/00 F24H7/04 F24J2/34 F28D20/02 F28D7/00 H01L31/042 (Advanced/Invention); F24F5/00 F24H7/00 F24J2/04 F28D20/02 F28D7/00 H01L31/042 (Core/Invention)

International (IPC 1-7): F24H7/00 F24J2/34

CPC: F28D20/0034 F24D3/08 F24D11/0257 F24D2200/08 F24D2200/12 F24D2200/14 F24F5/0017 F24F5/0046 F24F5/0096 F24F2005/0064 F28D20/021 F28D2021/0019 Y02B10/20 Y02B10/24 Y02B10/70 Y02B30/126 Y02E60/142 Y02E60/145 Y02E60/147 Y02E70/30 F24H7/04 Y02A30/272

European: F24D11/02D F24F5/00C5 F24F5/00F F24F5/00T F24H7/04 F28D20/00C F28D20/02A R24D200/08 R24D200/12 R24D200/14 R24D3/08 R24F5/00F9 R28D21/00T Y02B10/20 Y02B10/24 Y02B10/40 Y02B10/70 Y02B30/12B Y02E60/14B Y02E60/14D Y02E60/14F Y02E70/30

US: 122/13.01 122/13.010S 126/400 126/400S 126/617 165/104.11 165/104.110S 165/121 219/50 219/50S 392/496 392/496S

**Family:**

Publication number	Publication date	Application number	Application date
AU2007309350 AA	20080502	AU20070309350	20070807
AU2007309350 BB	20110512	AU20070309350	20070807
BRPI0715993 A2	20130806	BR2007PI15993	20070807
BRPI0715993 A2	20131015	BR2007PI15993	20070807
CA2673648 AA	20080502	CA20072673648	20070807
CN101523124 A	20090902	CN200780038437	20070807
IN01194KN2009 A	20090522	IN2009KN01194	20090327
JP2010507066 T2	20100304	JP20090533416T	20070807
KR20090080039 A	20090723	KR20097007675	20070807
MX2009003147 A1	20090525	MX20090003147	20070807
RU2009112291 A	20101127	RU20090112291	20070807
US2008092875 AA	20080424	US20070818401	20070613
US2009007900 AA	20090108	US20080212822	20080918
US2009173336 AA	20090709	US20090404802	20090316
US7441558 BB	20081028	US20070818401	20070613
US7958885 BB	20110614	US20080212822	20080918
WO08051646 A2	20080502	WO2007US75322	20070807
WO08051646 A3	20080821	WO2007US75322	20070807
WO08051646 C2	20081106	WO2007US75322	20070807

Priority:

US20060852844P 20061019 US20070818401 20070613 US20080212822 20080918
WO2007US75322 20070807 US20090404802 20090316

Probable Assignee: ELCAL RESEARCH LLC

Assignee(s): (std): ELCAL RES L L C ; ELCAL RES LLC ; LEIFER LESLIE ; ROWE JAY D

Assignee(s): ELCAL RESEARCH L L C ; ELCAL RESEARCH LLC

Inventor(s): (std): LESLIE LEIFER ; ROWE JAY D ; LEIFER LESLIE

Inventor(s): JAY D ROWE ; ROWE JAY

Agent(s): LORD AND CO; BORDEN LADNER GERVAIS LLP; DUANE MORRIS LLP; DUANE MORRIS LLP - PHILADELPHIA, IP DEPARTMENT; DUANE MORRIS LLP PHILADELPHIA IP DEPARTMENT; DUANE MORRIS LLP - PHILADELPHIA, IP DEPARTMENT; CHAMBERLAIN JEFFREY M ET AL

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

Title: AUXILIARY ELECTRIC POWER **SYSTEM** AND METHOD OF REGULATING VOLTAGES OF THE SAME

Abstract: Source: US2015073610A [EN] An electric power **system** for a wind turbine includes at least one auxiliary load bus configured to transmit electric power to auxiliary equipment. The auxiliary load bus is further configured to receive electric power having a voltage within a first predetermined tolerance range. The **system** also includes at least one **motor-generator** set coupled to the auxiliary load bus. The **motor-generator** set is configured to receive electric power having a voltage within a second predetermined tolerance range and transmit electric power to the auxiliary load bus in the first predetermined tolerance range.

Classifications:

International (IPC 8-9): F03D11/00 F03D7/02 G05B15/02 H02J11/00

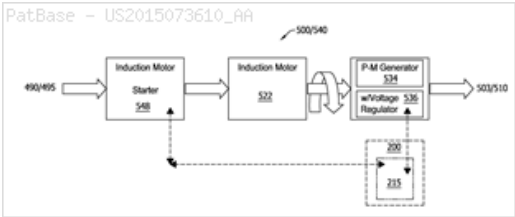
H02J3/38 (Advanced/Invention);

H02J3/38 (Advanced/Non-invention)

CPC: G05B15/02 F03D7/0272 H02J3/386 H02J11/00 Y02E10/723

Y02E10/763

US: 700/287



Family:

Publication number	Publication date	Application number	Application date
CA2862898 AA	20150311	CA20142862898	20140904
EP2866323 A1	20150429	EP20140183620	20140904
US2015073610 AA	20150312	US20130024044	20130911
US9513614 BB	20161206	US20130024044	20130911

Priority:

US20130024044 20130911

Probable Assignee: GENERAL ELECTRIC CO

Assignee(s): (std): GEN ELECTRIC

Assignee(s): GENERAL ELECTRIC CO ; JAYCO TIMOTHY WILCOX ; SCHNETZKA HAROLD ROBERT ; VUJANOVIC BRANISLAV ; WILMOT THEODORE STEVEN ; GE WIND ENERGY GMBH

Inventor(s): (std): VUJAOVIC BRANISLAV ; WILMOT THEODORE STEVEN ; VUJANOVIC BRANISLAV ; SCHNETZKA HAROLD ROBERT ; JAYCO TIMOTHY WILCOX ; JAYCO TIMOTHY WILCOX

Agent(s): CRAIG WILSON AND CO; BEDFORD GRANT RICHARD; JAMES; ARMSTRONG TEASDALE LLP

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

Title: METHODS TO FABRICATE VERTICALLY ORIENTED ANATASE NANOWIRE ARRAYS ON TRANSPARENT CONDUCTIVE SUBSTRATES AND APPLICATIONS THEREOF

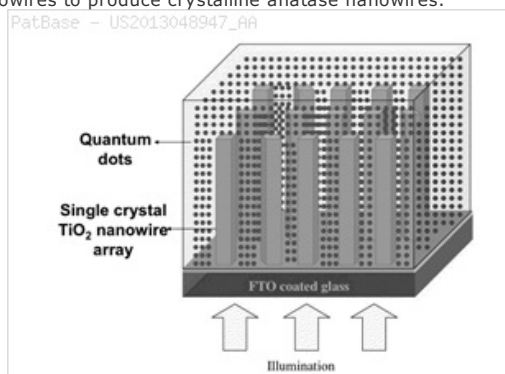
Abstract: Source: US2013048947A [EN] The present invention relates to growth of vertically-oriented crystalline nanowire arrays upon a transparent conductive or other substrate for use in 3rd generation **photovoltaic** and other applications. A method of growing crystalline anatase nanowires includes the steps of: deposition of titania onto a substrate; conversion of the titania into titanate nanowires; and, treatment of the titanate nanowires to produce crystalline anatase nanowires.

Classifications:

International (IPC 8-9): B01J21/06 B01J35/00 B01J35/06 B01J37/02 B01J37/03 B01J37/06 B01J37/34 B32B15/04 B82Y10/00 C30B1/02 C30B1/10 C30B29/34 C30B29/60 C30B7/10 H01L21/20 H01L21/36 H01L29/06 H01L29/12 H01L29/66 H01L31/0352 H01L31/04 H02J7/00 H02J7/14 H02J7/35 H02S10/30 (Advanced/Invention); H01G9/20 H01M10/46 (Advanced/Non-invention)

CPC: C30B1/10 C30B1/02 B01J21/063 B01J35/002 B01J35/004 B01J35/06 B01J37/0228 B01J37/033 B01J37/06 B01J37/346 B01J37/348 B82Y10/00 C30B7/10 C30B29/34 C30B29/602 H01G9/2031 H01L29/0665 H01L29/0676 H01L29/127 H01L31/035218 H01L31/035227 H01M10/46 H02J7/0052 H02J7/35 H02J2007/0059 H02S10/30 H01L31/046

US: 1/1 117/7 257/15 257/E21.09 257/E29.168 320/101 320/136 320/149 438/478 438/479 438/962



Family:

Publication number	Publication date	Application number	Application date
US2013048947 AA	20130228	US20120590786	20120821
US2014097786 AA	20140410	US20130016563	20130903
US2014196658 AA	20140717	US20140215722	20140317
US8835285 BB	20140916	US20120590786	20120821
US9394623 BB	20160719	US20140215722	20140317
US9711670 BB	20170718	US20130016563	20130903
WO13028734 A1	20130228	WO2012US51815	20120822

Priority:

US20110525926P 20110822 US20120590786 20120821 US20130016563 20130903
 US20120695485P 20120831 US20130792783P 20130315 US20140215722 20140317

Probable Assignee: FLUX PHOTON CORP

Assignee(s): (std): FENG XINJIAN ; FLUX PHOTON CORP ; FLUXPHOTON CORP ; GRIMES CRAIG ; GRIMES CRAIG A ; KREISLER KEVIN E ; KREISLER KEVIN ; LATEMPA THOMAS

Inventor(s): (std): FENG XINJIAN ; GRIMES CRAIG A ; KREISLER KEVIN E ; LATEMPA THOMAS ; KREISLER KEVIN ; GRIMES CRAIG

Agent(s): PORZIO BROMBERG AND NEWMAN PC ; DUNN MCKAY DIANE

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 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 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

Title: NEW CHEMICAL SPECIES OF A MAGNECULE

Abstract: Source: US2001038087A [EN] A novel chemical species, called magneccules, which is composed of clusters of molecules, and/or dimers, and/or atoms formed by internal bonds due to the magnetic polarization of the orbits of at least some of the peripheral atomic electrons present in the cluster, the intrinsic magnetic field of nuclei present in the cluster, and the intrinsic magnetic fields of valence electrons present in the cluster that are not correlated in singlet couplings to other electrons to form valence bonds is disclosed.

Classifications:

International (IPC 8-9): B01J19/08 B01J4/00 B01J7/00 C01B13/00 C01B3/00 C01B3/04 C01B3/22 C01B3/34 C02F1/02 C02F1/04 C02F1/46 C05F3/00 C05F3/06 C05F7/00 C09D7/12 C10G15/00 C10G15/08 C10J3/72 C10K1/02 C10L3/00 C10L3/06 C10L5/00 C21B13/12 C25B1/00 C25B1/02 C25B1/04 C25B1/06 C25B1/12 C25B15/00 C25B9/00 C25B9/06 C25B9/16 F02B43/02 F02B43/12 G21K1/00 H01F1/00 H05F3/04 H05H1/24

H05H1/48 (Advanced/Invention);

B23K35/38 (Advanced/Non-invention);

B01J19/08 C01B3/00 C10G15/00 C10L3/00 C21B13/00 C25B1/00

C25B15/00 C25B9/00 C25B9/06 C25B9/16 F02B43/00

H05H1/24 (Core/Invention)

International (IPC 1-7): B01J19/08 B01J19/12 C01B31/00 C02F1/02 C02F1/04 C02F1/46 C05F7/00 C09K3/00 C10G15/00 C10G15/08 C10J3/72 C10K1/02 C10L1/12 C10L3/00 C10L3/06 C25B1/00 C25B1/04 C25B1/06 C25B15/00 C25B9/00 C25B9/06 C25C1/02 F02B43/08 H05F3/00 H05F3/04 H05H1/24 H05H1/48

CPC: B01J2219/082 C01B3/342 H05H1/48 Y10S123/12 C25B1/06 B01J4/00 B01J7/00 B23K35/38 C25B1/04 C25B9/06 C25B15/00 C01B3/22 C01B2203/0266 C01B2203/0861 C05F3/00 C05F3/06 C10G2300/1003 C10G2300/1033 B01J2219/0839 C01B3/042 Y02E60/364 Y02E60/366 Y02E50/343 Y02E60/324 C02F1/4608 B01J19/088 B01J2219/0809 B01J2219/0818 B01J2219/0822 B01J2219/0828 B01J2219/083 B01J2219/0832 B01J2219/0841 B01J2219/0869 B01J2219/0871 B01J2219/0875 B01J2219/0877 B01J2219/0883 B01J2219/0884 B01J2219/0894 B01J2219/0898 C01B3/00 C01B13/00 C10G15/08 C10L3/00 C10L5/00 G21K1/00 H01F1/00 C01B3/0094 C01B5/00 Y02E60/368 Y02P20/145 Y02A40/205 Y02A40/208 C09D7/63

European: B01J19/08D2 B01J4/00 B01J7/00 C01B13/00 C01B3/00 C01B3/00Q C01B3/04B C01B3/22 C01B3/34G C01B5/00 C02F1/46J C05F3/00 C05F3/06 C10G15/08 C10L3/00 C10L5/00 C25B1/04 C25B1/06 C25B15/00 C25B9/06 G21K1/00 H01F1/00 H05H1/24 H05H1/48 L01J219/08D2B2 L01J219/08D2B4B L01J219/08D2B4D L01J219/08D2B5 L01J219/08D2B6B2 L01J219/08D2B6B4 L01J219/08D2B6D L01J219/08D2B8B L01J219/08D2B8D L01J219/08F L01J219/08H L01J219/08M2 L01J219/08M4 L01J219/08M8B L01J219/08M8D L01J219/08P L01J219/08P4 L23K35/38

M01B203/02F M01B203/08B10 Y02E20/18 Y02E60/32F Y02E60/36D Y02E60/36F Y02E60/36F2

US: 123/3 123/DIG.12 204/164 204/165 204/168 204/230.5 204/230.8 204/237 204/240 204/241 204/268 204/268S 204/269

204/274 204/275.1 204/278 204/278.5 205/628 205/630 252/62.51R 252/62.51RP 422/186.03 422/186.03S 422/186.04

422/186.04P 422/186.04S 422/186.21 422/186.22 422/186.23 422/186.26 422/186.27 44/628 48/197.0FM 48/197FM

Family:

Publication number	Publication date	Application number	Application date
AT546222 E	20120315	AT20000932500T	20000516
AU200050212 A1	20010305	AU20000050212	20000516
AU200050212 A5	20010305	AU20000050212D	20000516
AU2001265357 AA	20011217	AU20010265357	20010605
AU2001265357 BB	20060309	AU20010265357	20010605
AU200165357 A1	20011217	AU20010065357	20010605
AU200165357 A5	20011217	AU20010065357	20010605
AU2002240320 AA	20030303	AU20020240320	20020206
AU2002307169 AA	20021021	AU20020307169	20020404
AU2004315756 AA	20050825	AU20040315756	20040421
AU2007201275 AA	20080911	AU20070201275	20070323
BRPI0418057 A	20070417	BR2004PI18057	20040421
BRPI0701454 A	20081007	BR2007PI01454	20070418
CA2552970 AA	20050825	CA20042552970	20040421
CA2582698 AA	20080822	CA20072582698	20070323
CN101250709 A	20080827	CN200710109954	20070612
CN1446121 A	20031001	CN20018013903	20010605
CN1906330 A	20070131	CN200480040719	20040421
CZ306312 B6	20161130	CZ20020003998	20010605
DE60046947 D1	20120412	DE20006046947	20000516
DE60148264 D1	20131017	DE20016048264	20010605
EA200201173 A1	20031030	EA20020001173	20010605
EP1387876 A1	20040211	EP20020763976	20020404
EP1387876 A4	20040609	EP20020763976	20020404
EP1409129 A1	20040421	EP20000932500	20000516
EP1409129 A4	20050216	EP20000932500	20000516
EP1409129 B1	20120222	EP20000932500	20000516
EP1409129 B9	20121212	EP20000932500	20000516
EP1412080 A1	20040428	EP20010939886	20010605
EP1412080 A4	20050427	EP20010939886	20010605
EP1412080 B1	20130821	EP20010939886	20010605
EP1711648 A2	20061018	EP20040821337	20040421
EP1711648 A4	20070829	EP20040821337	20040421

PatBase - US2001038087_AA

Patent Application Publication Nov. 8, 2001 Sheet 1 of 31 US 2001/0038087 A1

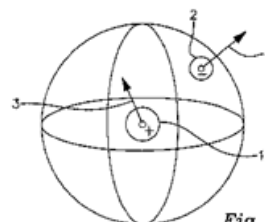


Fig. 1A

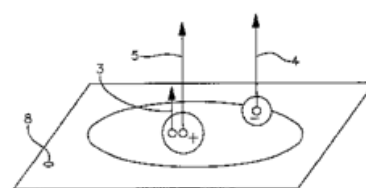


Fig. 1B

EP1967614 A2	20080910	EP20070107267	20070430
EP1967614 A3	20090114	EP20070107267	20070430
ES2386171 T3	20120810	ES20000932500T	20000516
HK1063331 A3	20041224	HK20040106032	20040811
HK1117205 A3	20090109	HK20080112203	20081106
IN01033DE2007 A	20080912	IN2007DE01033	20070511
IN04076DN2006 A	20070622	IN2006DN04076	20060714
JP2004506747 T2	20040304	JP20020501570T	20010605
JP2007519827 T2	20070719	JP20060551030T	20040421
JP5643470 B2	20141217	JP20020501570T	20010605
MX2007004873 A1	20081029	MX20070004873	20070423
MXPA06008195 A1	20060831	MX2006PA08195	20040421
NO20025818 A	20030205	NO20020005818	20021204
NO20025818 A0	20021204	NO20020005818	20021204
NO333340 B1	20130513	NO20020005818	20021204
US2001038087 AA	20011108	US20010826183	20010404
US2002004022 AA	20020110	US20010896422	20010629
US2003051992 AA	20030320	US20020073601	20020211
US2004074781 AA	20040422	US20020277841	20021022
US2004149591 AA	20040805	US20040760336	20040120
US2005258049 AA	20051124	US20050037700	20050118
US2006075683 AA	20060413	US20050274736	20051115
US2007080070 AA	20070412	US20050274813	20051115
US2007151846 AA	20070705	US20070709603	20070222
US6540966 BA	20030401	US20000586926	20000605
US6673322 BB	20040106	US20010896422	20010629
US6689259 BA	20040210	US20020065111	20020918
US6866756 BB	20050315	US20020277841	20021022
US7191737 BB	20070320	US20050037700	20050118
WO0110546 A1	20010215	WO2000US13465	20000516
WO0194004 A1	20011213	WO2001US18082	20010605
WO02081601 A1	20021017	WO2002US10904	20020404
WO03002250 A1	20030109	WO2002US03860	20020206
WO05076767 A2	20050825	WO2004US12498	20040421
WO05076767 A3	20051229	WO2004US12498	20040421

Priority:

CA20072582698	20070323	EP20000932500	20000516	EP20010939886	20010605
US19980015895	19980130	US19970785797	19970121	US19940254377	19940606
US19990372278	19990811	US19980133348	19980813	US19980106170	19980629
US20050037700	20050118	US20000635448	20000810	US20010896422	20010629
US20020073601	20020211	US20000586926	20000605	US20040760336	20040120
US20010826183	20010404	US20020277841	20021022	US20020065111	20020918
US20050274736	20051115	US20050274813	20051115	US20010822618	20010404
US20070709603	20070222	WO2004US12498	20040421	WO2001US18082	20010605
WO2000US13465	20000516	WO2002US03860	20020206	WO2002US10904	20020404

Probable Assignee: HYDROGEN TECHNOLOGY APPLICATIONS INC

Assignee(s): (std): DENNIS J KLEIN ; DENNIS KLEIN ; EARTHFIRST TECHNOLOGIES INC ; HADRONIC PRESS INC ; KLEIN DENNIS ; KLEIN DENNIS J ; KLIEN DENNIS J ; HYFUELS INC ; HYDROGEN TECHNOLOGY APPLIC INC ; HYDROGEN TECHNOLOGY APPLICATIONS INC ; HY FUELS INC ; SANTILLI RUGGERO MARIA ; ROSSO CO DI GANDIGLIO CAR ; ROSSO CO DI GANDIGLIO CARLA ; ROSO AND GANDILIUOCALA S P A ; SANTILLI RUGGERO M ; ROSSO COMPANY DI GANDIGLIO CAR ; ZENON MG INTERNAT HOLDINGS LLC ; ROSSO COMPANY DI GANDIGLIO CARLA ; ZENON MG INT HOLDINGS LLC

Assignee(s): ZENON MG INT HOLDINGS LLC TARPON SPRINGS ; ROSSO CO STUDIO OCCHINO ; ZENON MG INTERNATIONAL HOLDINGS LLC ; ROSSO CO ; ROSO AND GANDILIUOCALA SPA ; MAGNEGAS CORP ; POINT FINANCIAL INC ; MANNERS MICHAEL

Inventor(s): (std): SANTILLI RUGGERO M ; SANTILLI MARIA RUGGERO ; RUGGERO MARIA SANTILLI ; RAPP A PHILLIP M ; MARIA KLEIN DENNIS J SANTILLI ; M SANTILLI RUGGERO ; LYONS RICHARD A ; DENNIS J KLEIN ; SANTILLI RUGGERO MARIA ; SANTILLI RUGGERO ; KLIEN DENNIS J ; SANTILLI RUGERRO MARIA ; KLEIN DENNIS ; KLEIN DENNIS J ; RUGGERO M SANTILLI

Inventor(s): SANTILLI RUGGERO MARIA PALM HARBOR

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMOORENBURG PINI PATENT AND TRADE MARK ATTORNEYS; SMOORENBURG PATENT AND TRADE MARK ATTORNEYS; BORDEN LADNER GERVAIS LLP; RUEGER BARTHELT AND ABEL PATENTANWALTE; FIORAVANTI CORRADO; PORTAL GERARD ET AL; DENNIS G LAPOINTE LAPOINTE LAW GROUP PL; DENNIS G

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 KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MT MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RS 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

Title: ELECTRONIC TIMEPIECE AND ELECTRONIC **APPARATUS**

Abstract: Source: US2004105347A [EN] An electronic timepiece includes a radio wave receiving antenna (8) for receiving radio waves, electromagnetic **motors** (61, 65) for driving a time display part, a battery (5), and a body case for receiving the antenna (8), electromagnetic **motors** (61, 65), and the battery (5). The projection images projecting the antenna (8), electromagnetic **motors** (61, 65), and the battery (5) do not overlap as viewed in the viewing direction of a time display part are different each other, that is, they do not overlap two-dimensionally. By such a structure, the electronic timepiece can be thin and flat.

Classifications:

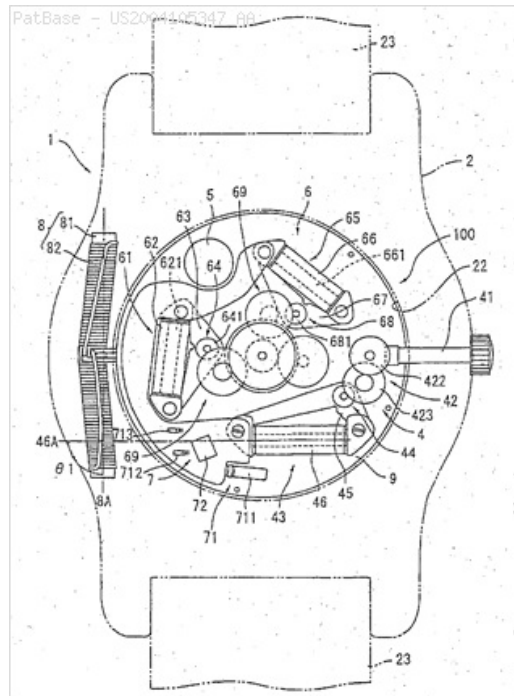
International (IPC 8-9): G04B1/00 G04C10/00 G04C11/02
G04C3/00 G04C3/14 G04C9/02 G04F5/00 G04G17/08 G04G21/04
G04R20/00 G04R20/08 G04R60/02 G04R60/10 (Advanced/Invention);
G04C9/02 (Advanced/Non-invention);
G04B1/00 G04C10/00 G04C11/00 G04C3/00 G04C9/00 G04F5/00
G04G17/00 G04G21/00 (Core/Invention)

International (IPC 1-7): G04B37/00 G04B43/00 G04C10/00
G04C3/00 G04C9/02 G04G1/00

CPC: G04G21/04 G04C3/008 G04R60/10

European: G04C3/00M G04G1/00D2 G04G21/04

US: 368/160 368/204 368/281 368/293 368/293P 368/47 368/88



Family:

Publication number	Publication date	Application number	Application date
CN1252550 C	20060419	CN20038000332	20030327
CN1514958 A	20040721	CN20038000332	20030327
EP1455248 A1	20040908	EP20030745019	20030327
EP1455248 A4	20080116	EP20030745019	20030327
HK1064451 A1	20060811	HK20040107076	20040916
HK1064451 A3	20050128	HK20040107076	20040916
JP2004003994 A2	20040108	JP20030073915	20030318
JP2004077491 A2	20040311	JP20030338262	20030929
JP3536852 B2	20040614	JP20030073915	20030318
KR100605776 B1	20060731	KR20037015443	20030327
KR20040003019 A	20040107	KR20037015443	20030327
US2004105347 AA	20040603	US20030400027	20030326
US7158449 BB	20070102	US20030400027	20030326
WO03081346 A1	20031002	WO2003JP03915	20030327

Priority:

JP20020089631 20020327 JP20020107131 20020409 JP20030073915 20030318
JP20030338262 20030929 WO2003JP03915 20030327

Probable Assignee: SEIKO EPSON CORP

Assignee(s): (std): SEIKO EPSON CORP

Assignee(s): FUJIMORI SHIGEYUKI ; KITAHARA JOJI

Inventor(s): (std): JOJI KITAHARA ; SHIGEYUKI FUJIMORI ; KITAHARA JOJI ; JOJI FUJIMORI SHIGEYUKI KITAHARA ; FUJIMORI SHIGEYUKI

Inventor(s): FUJIMORI SHIGEYUKI KITAHARA JOJI

Agent(s): ISHIZAKI TAKESHI; NAKAYAMA KANJI; KINOSHITA JITSUZO

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

Assignee(s): BRILLIANT LIGHT POWER INC ; BLACKLIGHT POWER CO
Inventor(s): (std): MILLS RANDELL L ; RANDELL L MILLS
Inventor(s): MILLS RANDELL
Agent(s): SPRUSON AND FERGUSON; C BRIAN BARLOW AND ASSOCIATES; RIDOUT AND MAYBEE LLP; BARLOW CHARLES BRIAN; MANELLI DENISON AND SELTER; FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER 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 KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA 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

Title: SOLAR DESALINATION SYSTEM

Abstract: Source: US2010275599A [EN] A **solar** desalination **system** for creation of desalinated water from seawater that produces electricity includes: a) a **solar** furnace unit including a vessel for receiving and evaporating seawater to create desalinated steam and a **solar** energy concentrator positioned adjacent the vessel to concentrate **solar** energy to the vessel; b) input for feeding seawater to the vessel; c) brine output for removal of brine water bottoms from the vessel; d) a riser pipe connected at its bottom to the vessel and extending upwardly from for transporting steam from the vessel to a higher elevation electric power-producing steam turbine generator; f) a drop pipe having a top and a bottom, and being connected at its tops to the steam turbine generator for removal of desalinated water from the steam turbine generator; g) a hydroturbine generator connected to the bottom of the drop pipe for production of electric power with desalinated water from the steam turbine generator; and, h) egress for removal of desalinated water from the hydroturbine generator for subsequent use.

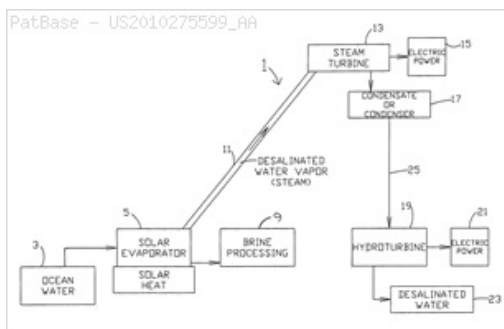
Classifications:

International (IPC 8-9): B01D3/00 C02F1/14 F01K17/04 F02C6/00 F03G6/00 F03G6/06 H02K7/18 (Advanced/Invention)

CPC: Y02E10/465 Y02E10/72 Y02E20/14 F03D1/04 F05B2220/20 F05B2240/131 F05B2240/132 F05B2260/24 Y02W10/37 B01D1/0035 B01D3/007 B01D5/006 B01D5/0081 C02F1/001 C02F1/14 C02F1/32 C02F2103/08 C02F2303/04 F01K17/04 F03B13/06 F03G6/065 Y02E10/22 Y02E10/46 Y02E60/17 Y02P70/34 Y02A20/128 Y02A20/129 Y02A20/142 Y02A20/212 Y02A20/141

European: B01D1/00B4B B01D3/00D B01D5/00H10 B01D5/00K10 C02F1/14 F01K17/04 F03B13/06 F03D1/04 F03G6/06R M02F1/00D M02F1/32 M02F103/08 M02F303/04 R05B220/20 R05B240/131 R05B240/132 R05B260/240 Y02E10/22 Y02E10/46 Y02E60/17

US: 202/182 202/182S 202/189 290/1.00RP 290/1R 60/641.11 60/641.15 60/641.9 60/641.900P 60/648 60/648S

**Family:**

Publication number	Publication date	Application number	Application date
US2010275599 AA	20101104	US20090387430	20090501
US2012112473 AA	20120510	US20110374150	20111214
US2012138447 AA	20120607	US20110374147	20111214
US8341961 BB	20130101	US20090387430	20090501

Priority:

US20090319248 20090105 US20090321402 20090120 US20090383353 20090323
 US20090384822 20090409 US20110374147 20111214 US20090387430 20090501
 US20110374150 20111214

Probable Assignee: KENERGY SCIENTIFIC INC

Assignee(s): (std): GLYNN KENNETH P ; KENERGY DEV CORP ; KENERGY SCIENT INC

Assignee(s): KENERGY SCIENTIFIC INC ; KENERGY DEVELOPMENT CORP

Inventor(s): (std): GLYNN KENNETH P

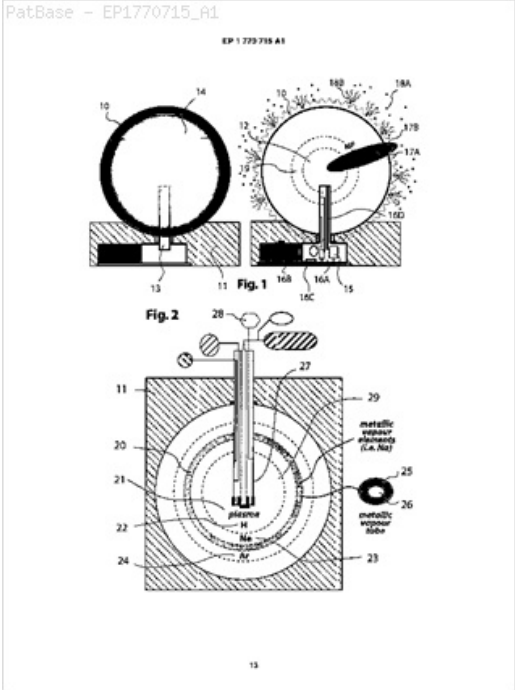
Agent(s): KENNETH P GLYNN; KENNETH P

Title: Micro plasma reactor

Abstract: Source: EP1770715A1 [EN] A fixed or handheld micro-plasma-reactor can be build-in, connected with and/or inserted into various electrical/electronic **devices** (i.e. mobile phones, computers), in various objects (i.e. lighting **devices** in general, light bulb, microchips, IC's), in various container types (i.e. cooking pan) and all type of machines, i.e. vacuum-cleaner, pumps, electrical car, etc., to generate DC current and/or AC, and consequently the various uses resulting from electrical current, for lighting, for heating/cooling, and desired process (i.e. creation magnetic **fields**). The self-sustaining plasmatic process gives independent functioning without connections to any electrical power network, **solar** cells or the need to recharge. New type of products will be created. Different type of micro-reactors are decrbed, and new methodes of technology.

Classifications:

International (IPC 8-9): G21B1/00 G21K1/00 (Advanced/Invention);
G21B1/00 G21K1/00 (Core/Invention)
CPC: G21B1/00 G21K1/00
European: G21B1/00 G21K1/00



Family:

Publication number	Publication date	Application number	Application date
EP1770715 A1	20070404	EP20050447236	20051020
EP1770717 A1	20070404	EP20050447221	20051003

Priority:

EP20050447221 20051003 EP20050447236 20051020

Probable Assignee: TAVAKOLI MEHRAN KESHE
Assignee(s): (std): TAVAKOLI MEHRAN KESHE
Assignee(s): TAVAKOLI KESHE MEHRAN
Inventor(s): (std): TAVAKOLI MEHRAN KESHE
Inventor(s): TAVAKOLI KESHE MEHRAN
Designated states: AL BA BE GB HR MK YU

Title: CUSTOMIZED ELECTRIC POWER STORAGE **DEVICE** FOR INCLUSION IN A COLLECTIVE MICROGRID

Abstract: Source: US2012232709A [EN] An electric power storage **device** is described herein, wherein the electric power storage **device** is included in a microgrid. The electric power storage **device** has at least one of a charge rate, a discharge rate, or a power retention capacity that has been customized for a collective microgrid. The collective microgrid includes at least two connected microgrids. The at least one of the charge rate, the discharge rate, or the power retention capacity of the electric power storage **device** is computed based at least in part upon specified power source parameters in the at least two connected microgrids and specified load parameters in the at least two connected microgrids.

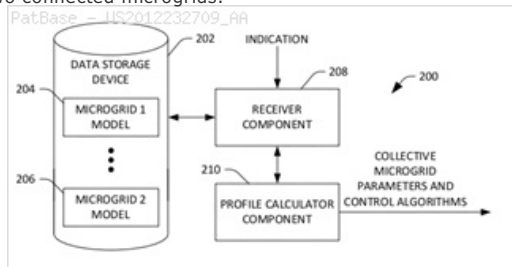
Classifications:

International (IPC 8-9): B63H3/00 G05B13/02 G05B15/02 G05D11/00 G05D17/00 G05D3/12 G05D5/00 G05D9/00 G05F1/67 G05F5/00 G06F1/26 G06F17/50 G06F19/00 G06F7/60 G06G7/48 G06G7/50 G06G7/63 G06Q50/06 H02H3/00 H02H3/05 H02J3/00 H02J3/32 H02J3/38 (Advanced/Invention); H02H3/14 H02J3/00 H02J3/32 H02J3/38 H02J7/34 (Advanced/Non-invention)

CPC: H02H3/006 H02H3/05 H02H3/14 Y02B20/40 Y02B20/48 Y04S20/16 Y04S20/221 H02J3/382 H02J7/34 Y02E60/76 Y04S40/22 H02J3/00 Y02E40/72 Y04S10/12 G06Q50/06 H02J3/32 H02J2003/007 H02J3/38 G05F1/67 G05B15/02 H02J13/0079

European: G05B11/06 G05B13/04

US: 1/1 416/36 700/286 700/287 700/296 700/45 700/97 703/1 703/2 703/7 703/9



Family:

Publication number	Publication date	Application number	Application date
US2012232709 AA	20120913	US20120481418	20120525
US2012283887 AA	20121108	US20120546342	20120711
US8121708 BA	20120221	US20080052180	20080320
US8527247 BA	20130903	US20090633045	20091208
US8930034 BA	20150106	US20110159303	20110613
US9172245 BA	20151027	US20120619469	20120914
US9263894 BB	20160216	US20120481418	20120525
US9721312 BB	20170801	US20120546342	20120711
US9851737 BA	20171226	US20140556820	20141201
WO13010129 A2	20130117	WO2012US46771	20120713
WO13010129 A3	20140515	WO2012US46771	20120713

Priority:

US20070896043P	20070321	US20080052180	20080320	US20110159303	20110613
US20090633045	20091208	US20090474349	20090529	US20100419966P	20101206
US20110241054	20110922	US20120481418	20120525	US20110507935P	20110714
US20120546342	20120711	US20120619469	20120914	US20120594001P	20120202
US20140556820	20141201				

Probable Assignee: NATIONAL TECHNOLOGY AND ENGINEERING SOLUTIONS OF SANDIA LLC

Assignee(s): (std): FORD JUSTIN R ; GOLDSMITH STEVEN Y ; LENTINE ANTHONY L ; NATIONAL TECH AND ENGINEERING SOLUTIONS OF SANDIA LLC ; SANDIA CORP ; ROBINETT III RUSH D ; WILSON DAVID G ; SPIRES SHANNON V

Assignee(s): NATIONAL TECHNOLOGY AND ENGINEERING SOLUTIONS OF SANDIA LLC ; US DEPARTMENT OF ENERGY ; ENERGY US DEPARTMENT OF

Inventor(s): (std): GOLDSMITH STEVEN Y ; ROBINETT III RUSH D ; WILSON DAVID G ; SPIRES SHANNON V ; LENTINE ANTHONY L ; FORD JUSTIN R

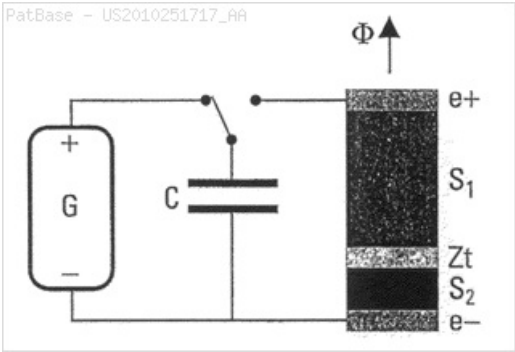
Agent(s): OLIVIA J; PEACOCK MYERS PC; ROBERT D; DANIEL J; BABBITT WILLIAM THOMAS ET AL

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 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

Title: PROPELLING **DEVICE** BY MEANS OF MATTER PARTICLES ACCELERATION, AND APPLICATIONS OF THIS **DEVICE**

Abstract: Source: US2010251717A [EN] Propelling **device** by way of matter particles acceleration, including **device** for accelerating the particles of matter, mainly in only one direction. The aforementioned **device** includes an **energy source** and an enclosure containing the matter particles to be accelerated, the enclosure being powered from the the **energy source**.

Classifications:
International (IPC 8-9): F03G7/00 F03H1/00 F03H5/00 F03H99/00 H05H1/54 H05H15/00 (Advanced/Invention); F03G7/00 F03H1/00 F03H99/00 H05H1/00 H05H15/00 (Core/Invention)
International (IPC 1-7): H05H15/00
CPC: F03H99/00 H05H1/54
European: F03H99/00 H05H1/54
US: 60/721



Family:

Publication number	Publication date	Application number	Application date
CA2640037 AA	20080723	CA20072640037	20070213
CA2640037 C	20150811	CA20072640037	20070213
CN101384820 A	20090311	CN200780005573	20070213
CN101384820 B	20121003	CN200780005573	20070213
EP1989442 A2	20081112	EP20070730962	20070213
EP1989442 B1	20170614	EP20070730962	20070213
FR2897398 A1	20070817	FR20060001274	20060214
IL193046 A0	20090211	IL20080193046	20080724
IL193046 A1	20120131	IL20070193046	20070213
IN07616DN2008 A	20081024	IN2008DN07616	20080908
JP2009526943 T2	20090723	JP20080554806T	20070213
US2010251717 AA	20101007	US20070224028	20070213
WO07093699 A2	20070823	WO2007FR00249	20070213
WO07093699 A3	20071115	WO2007FR00249	20070213

Priority:

FR20060001274 20060214 WO2007FR00249 20070213

Probable Assignee: POHER CLAUDE

Assignee(s): (std): CLAUDE PHOHER ; CLAUDE POHER ; PHOHER CLAUDE ; POHER CLAUDE

Inventor(s): (std): PHOHER CLAUDE ; POHER CLAUDE ; CLAUDE PHOHER

Agent(s): STIKEMAN ELLIOTT SENCRL SRL LLP; CAPRI; REINHOLD COHN AND PARTNERS; ABELMAN FRAYNE AND SCHWAB

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 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 MG MK ML MN MR 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

Title: ENERGY **SYSTEMS** AND ENERGY SUPPLY METHODS

Abstract: Source: US2013147272A [EN] Energy **systems** and energy supply methods are described. In one aspect, an energy **system** includes a bus **system** configured to conduct electrical energy, a plurality of input adapters electrically coupled with the bus **system** and configured to electrically couple with a plurality of respective source entities which are individually configured to provide electrical energy, a plurality of output adapters electrically coupled with the bus **system** and configured to electrically couple with a plurality of respective consuming entities which are individually configured to consume electrical energy, and control circuitry configured to control individual ones of the input adapters to provide electrical energy from respective ones of the source entities to the bus **system** and to control individual ones of the output adapters to provide electrical energy from the bus **system** to respective ones of the consuming entities.

Classifications:

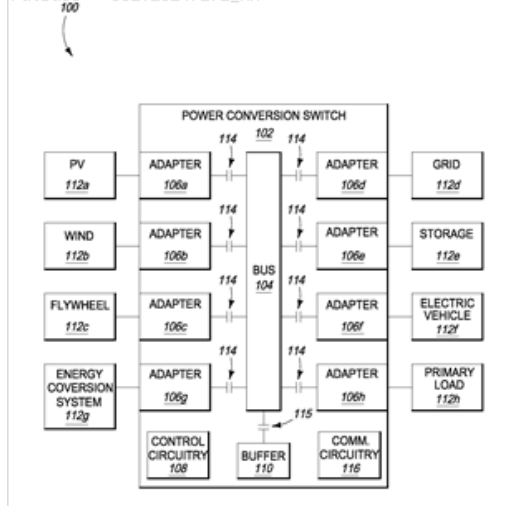
International (IPC 8-9): H02J3/36 H02J3/38 H02J4/00 H02J7/00 H02J7/34 (Advanced/Invention)

CPC: H02J3/36 H02J3/383 H02J3/386 Y02E10/563 Y02E10/763

Y02E60/60 Y10T307/391 H02J7/0068 H02J7/34 H02J7/007 H02J4/00

US: 307/29 320/136

PatBase - US2013147272_AA



Family:

Publication number	Publication date	Application number	Application date
US2013147272 AA	20130613	US20120495935	20120613
US2017098950 AA	20170406	US20160382300	20161216
US9525285 BB	20161220	US20120495935	20120613
WO12174145 A2	20121220	WO2012US42294	20120613
WO12174145 A3	20130314	WO2012US42294	20120613

Priority:

US20110496400P 20110613

US20120495935 20120613

US20160382300 20161216

Probable Assignee: DEMAND ENERGY NETWORKS INC

Assignee(s): (std): DEMAND ENERGY NETWORKS INC ; JOHNSON SHANE ; WALKER IAN ; COXON ALLAN

Assignee(s): DBCJ LLC ; VENTURE LENDING AND LEASING VI INC ; VENTURE LENDING AND LEASING VII INC

Inventor(s): (std): COXON ALLAN ; JOHNSON SHANE ; WALKER IAN

Agent(s): WELLS ST JOHN PS; SHAURETTE JAMES D

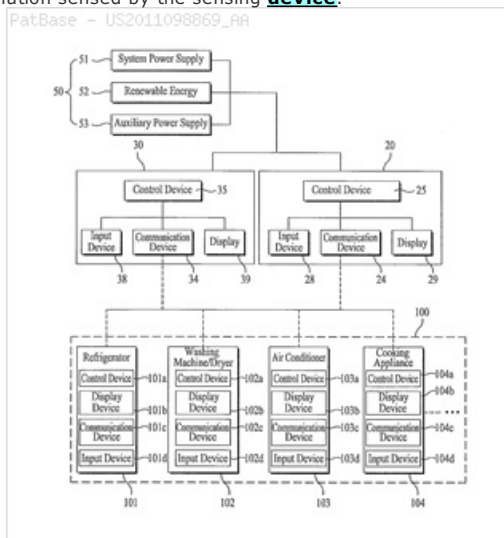
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU 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

Title: ELECTRIC APPLIANCE AND A CONTROL METHOD THEREOF

Abstract: Source: US2011098869A [EN] An electric appliance and a control method thereof are disclosed. The electric appliance includes a communication **device** connected with a smart grid net to recognize electric power information including power-rate information for each time period, a sensing **device** configured to sense a predetermined operation mode and an operation state according to the operation mode, and a control **device** configured to implement power-saving operation based on the received electric power information and the state information sensed by the sensing **device**.

Classifications:

International (IPC 8-9): D06F25/00 D06F33/02 F25D21/06
F25D29/00 G01D4/00 G05D3/12 G06F1/26 G06F1/32 G06F17/00
G06Q10/00 G08C15/00 G08C19/00 H02J3/14 H04L12/10 H04L12/12
H04L12/14 H04L12/16 H04L12/24 H04L12/28
H04Q9/00 (Advanced/Invention);
D06F33/02 G01D4/00 H04L12/10 H04L12/12
H04L12/28 (Advanced/Non-invention)
CPC: Y02B70/3266 Y02B90/244 Y04S20/242 Y04S20/327 Y02B60/50
H04L12/2803 H04L41/0833 H02J2003/143 Y02B90/246 Y04S20/42
Y04S40/162 H04L12/10 G01D4/004 H02J3/14 H02J2003/146
H04L12/12 H04L12/2827 H04L2012/285 Y02B70/3225 Y02B70/325
Y02B90/242 Y04S20/222 Y04S20/224 Y04S20/228 Y04S20/322
Y04S20/44 F25D29/00 F25D21/06 Y02D50/20 Y02D50/40
European: G01D4/00R1 H02J3/14 H04L12/10 H04L12/12
H04L12/28H T02J3/14T T04L12/28H11B Y02B60/34 Y02B70/32B4
Y04S20/22C Y04S20/22C2
US: 700/22 700/291 700/296 700/296P 705/412



Family:

Publication number	Publication date	Application number	Application date
CN102597353 A	20120718	CN201080048484	20101001
CN102597353 B	20150902	CN201080048484	20101001
CN102598580 A	20120718	CN201080048515	20101026
DE602010029778 D1	20160211	DE201060029778T	20101001
DE602010030059 D1	20160218	DE201060030059T	20101026
EP2494103 A2	20120905	EP20100826981	20101001
EP2494103 A4	20140226	EP20100826981	20101001
EP2494103 B1	20151223	EP20100826981	20101001
EP2494735 A2	20120905	EP20100827040	20101026
EP2494735 A4	20140319	EP20100827040	20101026
EP2494735 B1	20170118	EP20100827040	20101026
EP2494737 A2	20120905	EP20100827042	20101026
EP2494737 A4	20140319	EP20100827042	20101026
EP2494737 B1	20160106	EP20100827042	20101026
JP2013508875 T2	20130307	JP20120536647T	20101001
JP5529971 B2	20140625	JP20120536647T	20101001
KR101549023 B1	20150901	KR20090115202	20091126
KR101595391 B1	20160218	KR20090101942	20091026
KR101649633 B1	20160830	KR20090105635	20091103
KR101649634 B1	20160830	KR20090105636	20091103
KR20110045387 A	20110504	KR20090101942	20091026
KR20110048890 A	20110512	KR20090105635	20091103
KR20110048891 A	20110512	KR20090105636	20091103
KR20110058417 A	20110601	KR20090115202	20091126
KR20110139858 A	20111230	KR20100059930	20100624
US2011098869 AA	20110428	US20100909451	20101021
US2012209445 AA	20120816	US20100504025	20101026
US2012215370 AA	20120823	US20100504336	20101026
US8543250 BB	20130924	US20100909451	20101021
WO11052896 A2	20110505	WO2010KR06726	20101001
WO11052896 A3	20111013	WO2010KR06726	20101001
WO11052956 A2	20110505	WO2010KR07357	20101026
WO11052956 A3	20110929	WO2010KR07357	20101026
WO11052956 A9	20110728	WO2010KR07357	20101026
WO11052958 A2	20110505	WO2010KR07359	20101026
WO11052958 A3	20110929	WO2010KR07359	20101026

Priority:

EP20100826981	20101001	EP20100827042	20101026	KR20090101942	20091026
KR20090105636	20091103	KR20090105635	20091103	KR2009010942	20091026
KR20100059930	20100624	KR20090115202	20091126	WO2010KR06726	20101001
WO2010KR07357	20101026	WO2010KR07359	20101026		

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): AHN JUNHO ; CHOI HEUNGSIK ; JANG BONGMUN ; HWANG JINSEONG ; HWANG JIN SEONG ; HU JINYUL ; LG ELECTRONICS INC ; LEE WOOKJIN ; LEE HOONBONG ; KIM YANGHWAN ; SEO DAE GEUN ; MOON HYUNWOOK ; LEE KOONSEOK ; KIM WANSOO ; SEO MUNSEOK ; SEO DAEGEUN ; SEO MUN SEOK ; SIM SUNGHUN

Inventor(s): (std): AHN JUN HO ; AHN JUNHO ; CHOI HEUNGSIK ; GEUN SEO DAE ; BONGMUN JANG ; DAEGEUN SEO ; HWANG JIN SEONG ; JANG BONGMUN ; HWANG JINSEONG ; HU JINYUL ; JANG BONG MUN ; HOONBONG LEE ; JUNHO AHN ; JINSEONG HWANG ; SEO MUN SEOK ; SEO DAE GEUN ; LEE WOOKJIN ; SEO MUNSEOK ; LEE HOONBONG ; KIM YANGHWAN ; SEO DAEGEUN ; MOON HYUNWOOK ; LEE KOONSEOK ; KIM WANSOO ; KIM YANG HWAN ; LEE HOON BONG ; LEE KOON SEOK ; LEE WOOK JIN ; SEOK SEO MUN ; MUNSEOK SEO ; SIM SUNGHUN ; SEONG HWANG JIN ; YANGHWAN KIM ; WOOKJIN LEE

Agent(s): TER MEER STEINMEISTER AND PARTNER PATENTANWAELTE MBB; CABINET PLASSERAUD; URNER PETER; TER MEER STEINMEISTER AND PARTNER; BIRCH STEWART KOLASCH AND BIRCH LLP; KIM YONG IN ET AL; HAW YONG NOKE

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 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 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

Title: WAVE ENERGY RECOVERY **SYSTEM**

Abstract: Source: US2007164568A [EN] The present invention includes novel **apparatus** and methods for recovering energy from water waves. An embodiment of the present invention includes a buoy, a shaft, and an **electric power generating device**. The shaft is coupled to the buoy such that when the buoy moves vertically in response to a passing wave, the shaft rotates. The shaft is coupled to the **electric power generating device** such that when the shaft rotates, the generating **device** produces electric power. Once electric power is generated, it is delivered to shore, where it is stored, used to power a **device**, or delivered to a power distribution grid.

Classifications:

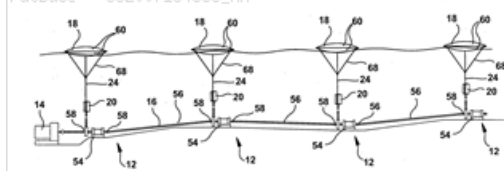
International (IPC 8-9): E02B17/00 F03B13/10 F03B13/12
F03B13/14 F03B13/16 F03B13/18 H02P9/04 (Advanced/Invention);
F03B13/00 H02P9/04 (Core/Invention)

CPC: E02B2017/0091 F03B13/1865 F03B13/1885 F05B2240/95
F05B2260/406 Y02E10/38 Y02E10/22

European: F03B13/18D8 F03B13/18H P02B17/00M R05B240/95
R05B260/406 Y02E10/38

US: 290/53 290/53P

PatBase - US2007164568_AA

**Family:**

Publication number	Publication date	Application number	Application date
AU2006318664 AA	20070531	AU20060318664	20061120
AU2012261663 AA	20130110	AU20120261663	20121211
CA2630440 AA	20080520	CA20062630440	20061120
CA2630440 C	20110208	CA20062630440	20061120
CN101535631 A	20090916	CN200680050568	20061120
CN101535631 B	20120704	CN200680050568	20061120
DE602006048384 D1	20160504	DE200660048384T	20061120
EP1960660 A2	20080827	EP20060838063	20061120
EP1960660 A4	20121010	EP20060838063	20061120
EP1960660 B1	20160323	EP20060838063	20061120
ES2570742 T3	20160520	ES20060838063T	20061120
JP2009516799 T2	20090423	JP20080541405T	20061120
JP5179370 B2	20130410	JP20080541405T	20061120
US2007164568 AA	20070719	US20060602145	20061120
US2009102200 AA	20090423	US20080313955	20081126
US7474013 BB	20090106	US20060602145	20061120
US7683500 BB	20100323	US20080313955	20081126
WO07061951 A2	20070531	WO2006US44898	20061120
WO07061951 A3	20090430	WO2006US44898	20061120

Priority:

AU20060318664	20061120	AU20120261663	20121211	US20080313955	20081126
US20060602145	20061120	US20050738287P	20051118	EP20060838063	20061120
WO2006US44898	20061120				

Probable Assignee: OCEAN ENERGY SYSTEMS LLC

Assignee(s): (std): ALTER GENE ; GREENSPAN ALEXANDER ; GREENSPAN GREG ; ORBITAL IND INC ; WAVE ENERGY RECOVERY LTD LLC ; WAVE ENERGY RECOVERY LLC

Assignee(s): ORBITAL IND INC SOLON ; WAVE ENERGY RECOVERY INC ; OCEAN ENERGY SYSTEMS LLC

Inventor(s): (std): ALEXANDER GREENSPAN ; ALTER GENE ; GENE ALTER ; GREENSPAN ALEXANDER ; GREENSPAN GREG ; GREG GREENSPAN

Inventor(s): GREENSPAN GREG SOLON ; GREENSPAN ALEXANDER SOLON ; ALTER GENE CHAGRIN FALLS

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; ROCKE CARSTEN; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; PONS ANGEL; MCDONALD HOPKINS CO LPA; MCDONALD HOPKINS LLC; PRIBISICH RISTO; EARP III ROBERT H; ROBERT H; RISTO

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 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 MG MK ML MN MR 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 SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: ELECTRIC POWER STATION

Abstract: Source: US2015280480A [EN] The **apparatus** and method of the present invention is a closed loop **system** that obtains, stores and transfers motive energy. Preferably, the majority of the electricity generated by the method of the present invention is utilized to service a load or supplied to the grid. A portion of the electric power produced is used to recharge the batteries for subsequent use of the electric **motor**. The **system** of the present invention controls and manages the battery power by controlling the charging and discharging of the battery reservoir via a series of electrical and mechanical innovations controlled by electronic instruction using a series of **devices** to analyze, optimize and perform power production and charging functions in sequence to achieve its purpose.

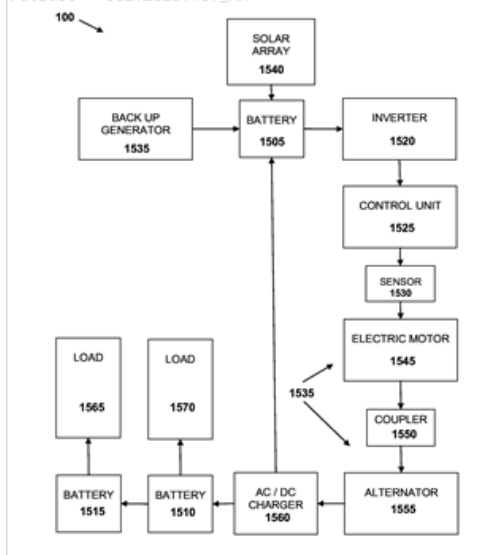
Classifications:

International (IPC 8-9): G01R1/20 G01R27/08 G01R31/36 H02J3/32 H02J7/00 H02J7/14 (Advanced/Invention); H02J7/35 (Advanced/Non-invention)

CPC: H02J7/0068 G01R1/203 G01R27/08 G01R31/36 G01R31/3658 H02J3/32 H02J7/0022 H02J7/0047 H02J7/1415 H02J7/35 Y02T10/7005 Y02T10/7055 Y10T307/336

US: 307/22

PatBase - US2015280480_AA



Family:

Publication number	Publication date	Application number	Application date
US2015280480 AA	20151001	US20140224405	20140325
US2017358941 AA	20171214	US20170627647	20170620
US9768632 BB	20170919	US20140224405	20140325
WO15148395 A1	20151001	WO2015US22050	20150323

Priority:

US20140224405 20140325 US20170627647 20170620

Probable Assignee: KLEPFER HOLDINGS LLC

Assignee(s): (std): KLEPFER DON ; KLEPFER HOLDINGS LLC ; MITRI GEORGE ; SCHMIDT DARRELL

Inventor(s): (std): KLEPFER DON ; MITRI GEORGE ; SCHMIDT DARRELL

Agent(s): PARK VAUGHAN FLEMING AND DOWLER LLP; SHANE; MILLS TIMOTHY F

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 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 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

Title: AIR CONDITIONER WITH **SOLAR** GENERATOR

Abstract: Source: US5878584A [EN] An air conditioner equipped with a **solar** generator is disclosed. The **solar** generator is capable of converting the DC power generated by a **solar** cell into the AC power whose voltage and frequency correspond to that of the commercial power source. The electrical power generated by the **solar** cell and the electrical power consumed by the air conditioner are monitored and may be displayed. The DC power generated by the **solar** cell is used directly by the air conditioner or used indirectly as the commercial power source by merging the converted AC power to the commercial power source. Further, the converted AC power may be selectively merged to the commercial power source depending on the various states of the air conditioner, and the air conditioning operations may be regulated depending on the electrical power generated by the **solar** cell.

Classifications:

International (IPC 8-9): F24F11/02 F24F5/00 F25B27/00 H02J1/00 H02J3/38 H02J5/00 H02J7/35 H02M7/44 H02M7/48 H02N6/00 (Advanced/Invention); F24F11/02 H02M7/44 H02N6/00 (Advanced/Non-invention); F24F11/02 F25B27/00 H02J1/00 H02J3/38 H02J7/35 H02M7/48 (Core/Invention)

International (IPC 1-7): F02J1/00 F24F11/00 F24F11/02 F24F5/00 F24J2/00 F25B27/00 H02J1/00 H02J1/10 H02J3/02 H02J3/38 H02J5/00 H02J7/35 H02M1/00 H02M7/44 H02M7/48 H02N6/00

CPC: Y02B30/745 Y10S323/906 H02J3/383 Y02E10/563 Y10T307/336 Y10T307/505 Y10T307/615 Y10T307/735 F24F5/0046

European: F24F5/00F H02J3/38 H02J3/38D1 Y02B30/74F

US: 307/22 307/44 307/64 307/87 323/906 62/115 62/236

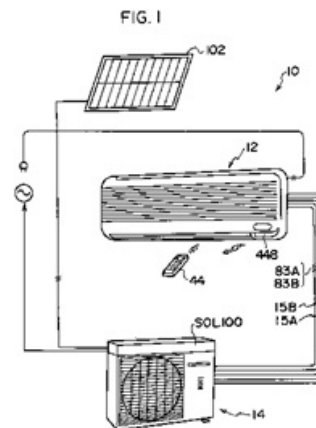
PatBase - US5878584_A

U.S. Patent

Mar. 9, 1999

Sheet 1 of 22

5,878,584



Family:

Publication number	Publication date	Application number	Application date
BRPI9601826 A	19990112	BR1996PI01826	19960613
CA2178190 AA	19961214	CA19962178190	19960604
CA2178190 C	20091201	CA19962178190	19960604
CA2636690 AA	19961214	CA19962636690	19960604
CN1093931 C	20021106	CN19961006177	19960613
CN1140250 A	19970115	CN19961006177	19960613
DE69630486 D1	20031204	DE19966030486	19960530
DE69630486 T2	20040812	DE19966030486T	19960530
EP0748991 A2	19961218	EP19960303893	19960530
EP0748991 A3	19980429	EP19960303893	19960530
EP0748991 B1	20031029	EP19960303893	19960530
JP3203161 B2	20010827	JP19950203467	19950809
JP3239049 B2	20011217	JP19950203469	19950809
JP8340634 A2	19961224	JP19950146599	19950613
JP9042803 A2	19970214	JP19950197631	19950802
JP9049653 A2	19970218	JP19950203467	19950809
JP9056076 A2	19970225	JP19950203469	19950809
KR100421474 B1	20040524	KR19960020985	19960612
KR19970002176 A	19970124	KR19960020985	19960612
MY130428 A	20070629	MY19960002108	19960530
TH26553 A	19970929	TH19961001939	19960611
TW336271 B	19980711	TW19960105970	19960521
US5878584 A	19990309	US19960662502	19960613
US5909061 A	19990601	US19970907234	19970806

Priority:

CA19962178190 19960604	CA19962636690 19960604	JP19950197631 19950802
JP19950203467 19950809	JP19950203469 19950809	JP19950146599 19950613
US19970907234 19970806	US19960662502 19960613	

Probable Assignee: SANYO ELECTRIC CO LTD

Assignee(s): (std): SANYO ELECTRIC CO ; SANYO ELECTRIC CO CO LTD

Assignee(s): SANYO ELECTRIC CO LTD ; SASAKI SHIGEHARU ; TOKIZAKI HISASHI ; KOGA KENICHI ; MADENOKOJI MASAKI ; ONIZUKA KEIGO

Inventor(s): (std): HISASHI TOKIZAKI ; KEIGO ONIZUKA ; KENICHI KOGA ; KOGA KENICHI ; MADENOKOJI MASAKI ; MADENOKOJI MASAKI ; MARINOKOJI MASAKI ; ONITSUKA KEIGO ; ONIZUKA KEIGO ; SASAKI SHIGEHARU ; SHIGEHARU SASAKI ; TOKIZAKI HISASHI ; TOKISAKI HISASHI

Inventor(s): MASAKI MADENOKOUJI
Agent(s): GOWLING LAFLEUR HENDERSON LLP
Designated states: DE FR GB IT

Title: **SYSTEM** AND METHOD FOR GENERATING HIGH PRESSURE HYDROGEN

Abstract: Source: US2003141200A [EN] The invention provides a **system** and a method for generating high pressure hydrogen that is able to efficiently and safely generate hydrogen only by electrolysis of water even by using an **electric power generated** by a frequently varying natural energy such as sunlight without using any compressors. The **system** comprises an electrolysis cell using polyelectrolyte membranes, particularly a double-polarity multi-layered type electrolysis cell having a specified structure is disposed in a vessel for storing generated hydrogen, preferably for storing cooled hydrogen under a high pressure hydrogen atmosphere. High pressure hydrogen is generated by electrolysis of pure water using the electrolysis cell by suppressing the pressure applied to the cell to a pressure below the pressure resistance of the cell using a differential pressure sensor and pressure controller.

Classifications:

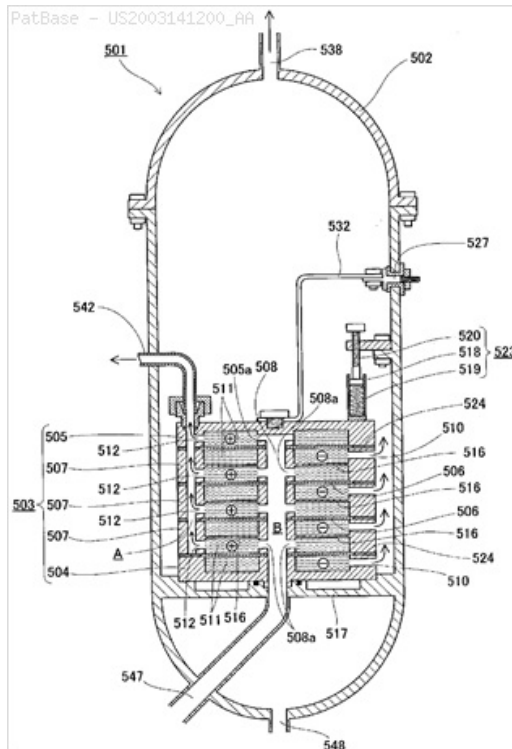
International (IPC 8-9): C01B3/02 C02F1/20 C02F1/42 C25B1/02 C25B1/04 C25B1/10 C25B1/12 C25B11/02 C25B15/00 C25B15/02 C25B15/08 C25B9/00 C25B9/06 C25B9/10 C25B9/18 C25B9/20 G01L13/02 H01M8/06 H01M8/10 (Advanced/Invention); C25B1/12 H01M8/06 H01M8/10 (Advanced/Non-invention); C02F1/20 C02F1/42 C25B1/00 C25B15/00 C25B9/00 C25B9/06 C25B9/18 H01M8/06 H01M8/10 (Core/Invention); H01M8/06 H01M8/10 (Core/Non-invention); C25B (Subclass/Invention); C01B (Subclass/Non-invention)

International (IPC 1-7): C01B3/02 C02F1/20 C02F1/42 C25B1/04 C25B1/10 C25B1/12 C25B11/02 C25B15/00 C25B15/02 C25B15/08 C25B9/00 C25B9/10 C25B9/18 H01M8/06 H01M8/10

CPC: Y02W10/37 Y02P20/134 C25B9/066 C25B15/02 C25B15/08 Y02E60/366 C25B1/12

European: C25B1/12 C25B15/02 C25B15/08 C25B9/06B2 Y02E60/36F Y02E60/50 Y02E60/52B Y02E70/10

US: 204/256 204/266 205/637 73/716



Family:

Publication number	Publication date	Application number	Application date
AU2003203234 AA	20030902	AU20030203234	20030116
BR0302900 A	20040706	BR20030002900	20030116
BRPI0302900 A	20040706	BR2003PI02900	20030116
CA2446563 AA	20031106	CA20032446563	20030116
CN1330792 C	20070808	CN20038000347	20030116
CN1514890 A	20040721	CN20038000347	20030116
EP1473386 A1	20041103	EP20030701743	20030116
EP1473386 A4	20050406	EP20030701743	20030116
HK1065570 A1	20071018	HK20040108456	20041028
HK1065570 A3	20050225	HK20040108456	20041028
IN01868DN2003 A	20051216	IN2003DN01868	20031110
IS7045 A	20031120	IS20030007045	20031120
JP2003221690 A2	20030808	JP20020019713	20020129
JP2003277963 A2	20031002	JP20020077344	20020319
JP2003342773 A2	20031203	JP20020153961	20020528
JP2004018982 A2	20040122	JP20020178415	20020619
JP4010152 B2	20071121	JP20020019713	20020129
JP4010165 B2	20071121	JP20020077344	20020319
JP4010185 B2	20071121	JP20020153961	20020528
JP4010193 B2	20071121	JP20020178415	20020619
KR20040080332 A	20040918	KR20037015472	20030116
MXPA03010957 A1	20050408	MX2003PA10957	20030116
NO20034366 A	20031128	NO20030004366	20030929
NO20034366 A0	20030929	NO20030004366	20030929
NZ529468 A	20031219	NZ20030529468	20030116
RU2003133444 A	20050410	RU20030133444	20030116
TH62903 A	20040709	TH20031002799	20030728
TW200303373 A	20030901	TW20030101974	20030129
TWI226909 B	20050121	TW20030101974	20030129
US2003141200 AA	20030731	US20030352968	20030129
US2006157354 AA	20060720	US20050297519	20051209
US7048839 BB	20060523	US20030352968	20030129
WO03064727 A1	20030807	WO2003JP00319	20030116

Priority:

JP20020019314 20020319

JP20020019314U 20020319

JP20020019713 20020129

JP20020174815 20020619 US20030352968 20030129 JP20020153961 20020528
JP20020077314 20020319 JP20020077344 20020319 JP20020178415 20020619
WO2003JP00319 20030116 US20050297519 20051209

Probable Assignee: HARADA HIROYUKI

Assignee(s): (std): MITSUBISHI CORP

Assignee(s): HARADA HIROYUKI

Inventor(s): (std): HARADA MICHYUKI ; HIROYUKI HARADA ; HARADA HIROYUKI

Inventor(s): Harada Kiroyuki

Agent(s): HODGKINSON MCINNES PATENTS; IP SOLVED ANZ PTY LTD; KIRBY EADES GALE BAKER; MCDERMOTT
WILL AND EMERY LLP

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

Title: H₂O-BASED ELECTROCHEMICAL HYDROGEN-CATALYST POWER **SYSTEM**

Abstract: Source: US2014072836A [EN] An electrochemical power **system** is provided that generates an electromotive force (EMF) from the catalytic reaction of hydrogen to lower energy (hydrino) states providing direct conversion of the energy released from the hydrino reaction into electricity, the **system** comprising at least two components chosen from: H₂O catalyst or a source of H₂O catalyst; atomic hydrogen or a source of atomic hydrogen; reactants to form the H₂O catalyst or source of H₂O catalyst and atomic hydrogen or source of atomic hydrogen; and one or more reactants to initiate the catalysis of atomic hydrogen. The electrochemical power **system** for forming hydrinos and electricity can further comprise a cathode compartment comprising a cathode, an anode compartment comprising an anode, optionally a salt bridge, reactants that constitute hydrino reactants during cell operation with separate electron flow and ion mass transport, and a source of hydrogen. Due to oxidation-reduction cell half reactions, the hydrino-producing reaction mixture is constituted with the migration of electrons through an external circuit and ion mass transport through a separate path such as the electrolyte to complete an electrical circuit. A power source and hydride reactor is further provided that powers a power **system** comprising (i) a reaction cell for the catalysis of atomic hydrogen to form hydrinos, (ii) a chemical fuel mixture comprising at least two components chosen from: a source of H₂O catalyst or H₂O catalyst; a source of atomic hydrogen or atomic hydrogen; reactants to form the source of H₂O catalyst or H₂O catalyst and a source of atomic hydrogen or atomic hydrogen; one or more reactants to initiate the catalysis of atomic hydrogen; and a support to enable the catalysis, (iii) thermal **systems** for reversing an exchange reaction to thermally regenerate the fuel from the reaction products, (iv) a heat sink that accepts the heat from the power-producing reactions, and (v) a power conversion **system**.

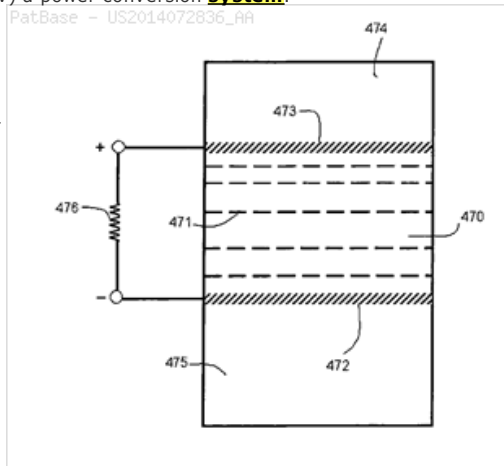
Classifications:

International (IPC 8-9): C01B3/00 C01B3/04 C25B1/04 C25B1/10 C25B9/00 G21B1/00 G21B3/00 G21D7/00 H01M H01M10/36 H01M10/39 H01M10/60 H01M12/08 H01M14/00 H01M4/00 H01M4/86 H01M4/94 H01M4/96 H01M8/00 H01M8/02 H01M8/04 H01M8/04701 H01M8/04746 H01M8/06 H01M8/0656 H01M8/08 H01M8/12 H01M8/14 H01M8/18 H01M8/22 (Advanced/Invention); H01M8/12 (Advanced/Non-invention); H01M (Subclass/Invention)

CPC: C25B1/04 Y02E60/528 G21B3/002 G21D7/00 H01M4/8626 H01M4/96 H01M8/0656 H01M8/186 Y02E60/366 H01M8/184 Y02E60/324 H01M8/06 H01M4/94 H01M8/22 H01M14/00

European: G21B3/00A G21D7/00 H01M14/00 H01M4/86B8 H01M4/94 H01M4/96 H01M8/06B6 H01M8/18C H01M8/22 T01M8/18C2

US: 429/422 429/8

**Family:**

Publication number	Publication date	Application number	Application date
AR085947 AA	20131106	AR2012P101205	20120409
AU2012240401 AA	20121011	AU20120240401	20120330
AU2017203998 AA	20170706	AU20170203998	20170614
BR112013025595 A2	20161227	BR20131125595	20120330
CA2830364 AA	20130913	CA20122830364	20120330
CN103460469 A	20131218	CN201280017225	20120330
CN107190275 A	20170922	CN201710358366	20120330
EA201301115 A1	20140331	EA20130001115	20120330
EP2702623 A1	20140305	EP20120715500	20120330
GC5091 A	20170306	GC2012P020988	20120407
IL228358 A0	20131231	IL20120228358	20120330
IN08284DN2013 A	20160422	IN2013DN08284	20130923
JP2014518585 T2	20140731	JP20140503702T	20120330
JP2016035924 A2	20160317	JP20150178971	20150910
JP2017112112 A2	20170622	JP20160244333	20161216
JP5809348 B2	20151110	JP20140503702T	20120330
JP6134360 B2	20170524	JP20150178971	20150910
KR20140016921 A	20140210	KR20137026170	20120330
MX2013011480 A1	20140312	MX20130011480	20120330
SG10201608591W A1	20161229	SG20161008591	20120330
SG193922 A1	20131129	SG20130070651	20120330
TW201314997 A	20130401	TW20120112102	20120405
TWI555258 B	20161021	TW20120112102	20120405
US2014072836 AA	20140313	US20120005851	20120330
WO12138576 A1	20121011	WO2012US31639	20120330
ZA201306844 A	20141126	ZA20130006844	20130911

Priority:

AU20120240401	20120330	AU20170203998	20170614	JP20140503702T	20120330
JP20150178971	20150910	JP20150178971	20120330	CN201280017225	20120330
US20110515505P	20110805	US20110505719P	20110708	US20110490903P	20110527
US20110498245P	20110617	US20110472076P	20110405	US20110482932P	20110505
US20110485769P	20110513	JP20160244333	20161216	US20120612607P	20120319
US20110578465P	20111221	US20110559504P	20111114	US20110538534P	20110923
US20120591532P	20120127	US20110566225P	20111102	WO2012US31639	20120330
US20120005851	20120330	US20110566225P	20111202		

Probable Assignee: BRILLIANT LIGHT POWER INC

Assignee(s): (std): BLACK LIGHT POWER INC ; BLACKLIGHT POWER INC ; MILLS RANDELL L ; MILLS RANDELL LEE

Assignee(s): RANDELL L MILLS ; BRILLIANT LIGHT POWER INC

Inventor(s): (std): RANDELL L MILLS ; MILLS RANDELL LEE ; MILLS RANDELL L

Inventor(s): RANDELL LEE MILLS

Agent(s): SPRUSON AND FERGUSON; GOWAN INTELLECTUAL PROPERTY; RIDOUT AND MAYBEE LLP; UEXKUELL AND STOLBERG; HASSAN AL MULLA; SPRUSON AND FERGUSON ASIA PTE LTD; TROILO LOUIS 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 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 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

Title: SELF-SUSTAINING **ELECTRIC-POWER GENERATOR** UTILIZING ELECTRONS OF LOW INERTIAL MASS TO MAGNIFY INDUCTIVE ENERGY

Abstract: Source: US2007007844A [EN] Electrical oscillations in a metallic "sending coil" radiate inductive photons toward one or more "energy-magnifying coils" comprised of a photoconductor or doped semiconductor coating a metallic conductor, or comprised of a superconductor. Electrons of low inertial mass in the energy-magnifying coil(s) receive from the sending coil a transverse force having no in-line backforce, which exempts this force from the energy-conservation rule. The low-mass electrons in the energy-magnifying coil(s) receive increased acceleration proportional to normal electron mass divided by the lesser mass. Secondly radiated inductive-photon energy is magnified proportionally to the electrons' greater acceleration, squared. E.g., the inductive-energy-magnification factor of CdSe photoelectrons with 0.13x normal electron mass is 59x. Magnified inductive-photon energy from the energy-magnifying coil(s) induces oscillating electric energy in one or more metallic "output coil(s)." The electric energy output exceeds energy input if more of the magnified photon-induction energy is directed toward the output coil(s) than is directed as a counter force to the sending coil. After an external **energy source** initiates the oscillations, feedback from the generated surplus energy makes the **device** a self-sustaining generator of electric power for useful purposes.

Classifications:

International (ipc 8-9): F02B63/04 H01F27/00 H01H47/00 H01J11/04 H01J17/26 H01J7/24 H01J7/46 H02K3/04

H02K7/18 (Advanced/Invention);

H02K53/00 H02N11/00 (Advanced/Non-invention);

F02B63/00 H01H47/00 H01J11/04 H01J17/02 H01J7/00

H02K3/04 (Core/Invention);

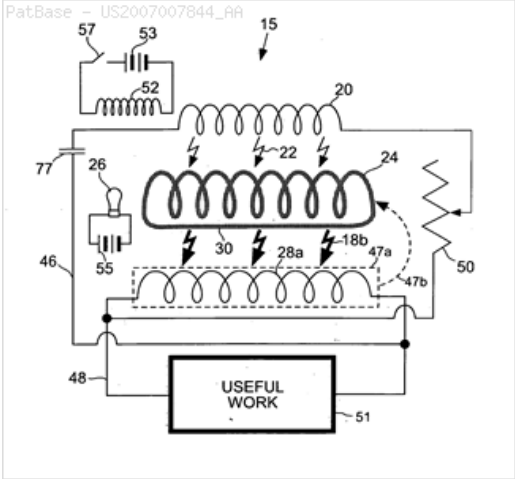
F02B H01H H01J (Subclass/Invention)

International (ipc 1-7): H02K3/04

CPC: H01F27/006 H02K53/00 H02N11/008

European: H02K53/00 H02N11/00D

US: 290/1.00RP 290/1R 310/208 310/208P 336/73 74/DIG.009 74/DIG.9



Family:

Publication number	Publication date	Application number	Application date
CN101427013 A	20090506	CN200780008256	20070223
CN101427013 B	20121219	CN200780008256	20070223
EP1999836 A2	20081210	EP20070751645	20070223
EP1999836 A4	20111228	EP20070751645	20070223
EP2505807 A2	20121003	EP20120173287	20070223
HK1133055 A1	20130913	HK20090110286	20091105
IN03455KN2008 A	20090220	IN2008KN03455	20080825
JP2009529314 T2	20090813	JP20080558295T	20070223
US2007007844 AA	20070111	US20060369446	20060306
US2012080888 AA	20120405	US20110104889	20110510
US2014159845 AA	20140612	US20140179256	20140212
WO07103020 A2	20070913	WO2007US04902	20070223
WO07103020 A3	20081030	WO2007US04902	20070223

Priority:

EP20070751645 20070223 US20050697729P 20050708 US20060369446 20060306
WO2007US04902 20070223 US20110104889 20110510 US20140179256 20140212
US20120659043 20121024

Probable Assignee: LEVITRONICS INC

Assignee(s): (std): BARBAT WILLIAM N ; LEVITRONICS INC

Inventor(s): (std): BARBAT WILLIAM N

Inventor(s): BARBAT WILLIAM

Agent(s): FREEMAN JACQUELINE CAROL; KLARQUIST SPARKMAN 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 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 MG MK ML MN MR 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

Title: POWER SUPPLY **APPARATUS** AND ELECTRONIC EQUIPMENT

Abstract: Source: US2002190689A [EN] To provide a power supply **apparatus** that replaces a dry battery by detecting electric **field** energy in a free space, rectifying the energy, extracting the energy as electric power, and accumulating the electric power. In particular, there is provided a power supply **apparatus** that is useful for a portable electronic equipment. An electromagnetic energy conversion unit collects a radio wave propagating in the air and converts collected electromagnetic energy into electric power. A rectifying unit generates electric power having a DC waveform by rectifying electric power having an AC waveform and charges the rectified electric power having the DC waveform into a secondary battery. An electric load is supplied with the rectified electric power having the DC waveform or with electric power having a DC waveform discharged from the secondary battery.

Classifications:

International (IPC 8-9): G04C10/00 G04C10/02 G04G19/00
H01Q1/24 H02J17/00 H02M3/07 H04B1/16 H04B13/00
H04B7/26 (Advanced/Invention)

International (IPC 1-7): G04C10/00 G04G1/00 H01M10/44
H02J17/00 H02J7/00 H02M3/07 H04B7/26

CPC: H02J7/025 H02J50/20 H02J50/70 H04B1/1607 G04C10/00
H01Q1/248 H02J17/00 H02M3/07 H04B13/005

European: G04C10/00 H01Q1/24E H02J17/00 H02M3/07 H04B1/16A
H04B13/00B

US: 320/102 320/102P 320/108 320/114 320/137

PatBase - US2002190689_AA

Patent Application Publication Doc. 19, 2002 Sheet 1 of 35 US 2002/0190689 A1

FIG. 1

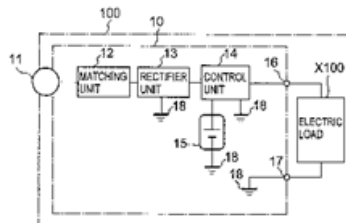
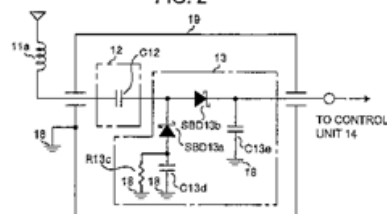


FIG. 2



Family:

Publication number	Publication date	Application number	Application date
DE60236897 D1	20100812	DE20026036897	20020517
DE60236898 D1	20100812	DE20026036898	20020517
DE60243171 D1	20120816	DE20026043171	20020517
EP1263114 A2	20021204	EP20020253490	20020517
EP1263114 A3	20031008	EP20020253490	20020517
EP1263114 B1	20120620	EP20020253490	20020517
EP1722284 A2	20061115	EP20060076539	20020517
EP1722284 A3	20061129	EP20060076539	20020517
EP1722284 B1	20100630	EP20060076539	20020517
EP1724649 A2	20061122	EP20060076541	20020517
EP1724649 A3	20070103	EP20060076541	20020517
EP1729187 A2	20061206	EP20060076540	20020517
EP1729187 A3	20070103	EP20060076540	20020517
EP1729187 B1	20100630	EP20060076540	20020517
JP2003088005 A2	20030320	JP20020131913	20020507
JP3905418 B2	20070418	JP20020131913	20020507
US2002190689 AA	20021219	US20020147420	20020516
US6809498 BB	20041026	US20020147420	20020516

Priority:

EP20020253490 20020517 JP20010148743 20010518 JP20020131913 20020507

Probable Assignee: SEIKO INSTRUMENTS INC

Assignee(s): (std): SAITOH YUTAKA ; SEIKO INSTR INC ; SEIKO INSTRUMENTS INC ; TANAKA TSUTOMU

Assignee(s): KATO KAZUO ; MATSUBARA KAZUO ; NAKAMURA CHIAKI

Inventor(s): (std): KATO KAZUO ; SAITO YUTAKA ; TANKA TSUTOMU ; SAITOH YUTAKA ; NAKAMURA CHIAKI ; MATSUBARA KAZUO ; KATAO KAZUO ; TANAKA TSUTOMU ; TANAKA ATSUSHI

Inventor(s): TANAKA TSUTOMU C O TAKION CO LTD ; KATAO KAZUO C O SEIKO INSTRUMENTS INC ; SAITOH YUTAKA C O TAKION CO LTD ; MATSUBARA KAZUO C O TAKION CO LTD ; NAKAMURA CHIAKI C O SEIKO INSTRUMENTS INC

Agent(s): STURT CLIFFORD MARK; CLOUGHLEY PETER ANDREW

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

Title: POWER GENERATION UNIT DRIVER, POWER GENERATION UNIT AND ENERGY OUTPUT EQUIPMENT IN POWER GRID

Abstract: Source: US2014049229A [EN] A power generation unit driver, a power generation unit and energy output equipment in a power grid are described. The power generation unit driver includes a drive controller for generating a drive signal according to a first control signal and a second control signal obtained thereby, a converter for transforming the input energy from a first voltage into a second voltage according to the drive signal and outputting the same to an electric **motor** connected to the power generation unit driver. The first control signal runs condition information of the electric **motor**, and the second control signal includes the power grid frequency and/or the voltage amplitude of the power grid. The concept produces improved effects on the stability of power supply by a power grid.

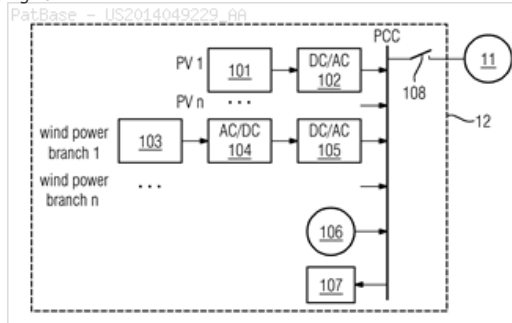
Classifications:

International (IPC 8-9): H02J3/00 H02J3/12 H02J3/28 H02J3/32 H02J3/38 H02M5/38 H02P11/06 H02P29/00 H02P9/14 (Advanced/Invention)

CPC: Y02E70/30 H02J3/32 H02J3/386 H02M5/38 Y02E10/563 Y02E10/566 Y02E10/763 H02P11/06 H02J3/383

European: H02J3/32 H02J3/38D1 H02M5/38

US: 322/39



Family:

Publication number	Publication date	Application number	Application date
BR112013023155 A2	20161213	BR20131123155	20120309
CN102244498 A	20111116	CN201110059905	20110311
CN102244498 B	20130918	CN201110059905	20110311
CN202019336 U	20111026	CN201120064590U	20110311
EP2684269 A2	20140115	EP20120712079	20120309
IN02680KN2013 A	20140411	IN2013KN02680	20130905
RU2013145508 A	20150420	RU20130145508	20120309
RU2576021 C2	20160227	RU20130145508	20120309
US2014049229 AA	20140220	US20120004469	20120309
WO12123365 A2	20120920	WO2012EP54128	20120309
WO12123365 A3	20121115	WO2012EP54128	20120309

Priority:

CN201110059905 20110311 CN201120064590U 20110311 WO2012EP54128 20120309

Probable Assignee: SIEMENS AG

Assignee(s): (std): LI JING ; LIAO HUA ; LIU XIN HUA ; SIEMENS AG ; ZHANG JING WEI

Assignee(s): SIMENS AKTSIENGEZELL SHAFT ; SIEMENS AKTIENGESELLSCHAFT ; SIEMENS LTD CHINA

Inventor(s): (std): JINGWEI ZHANG ; LI JING ; LI TSZIN ; LIAO HUA ; LIU XIN HUA ; LIU XINHUA ; LJAO KHUA ; LIU SJAN KHUA ; CHZHAN TSZIN VEHI ; HUA LIAO ; JING LI ; XINHUA LIU ; ZHANG JING WEI ; ZHANG JINGWEI

Inventor(s): JING WEI ZHANG ; XIN HUA LIU

Agent(s): WOLFF HARRY; SIEMENS AKTIENGESELLSCHAFT

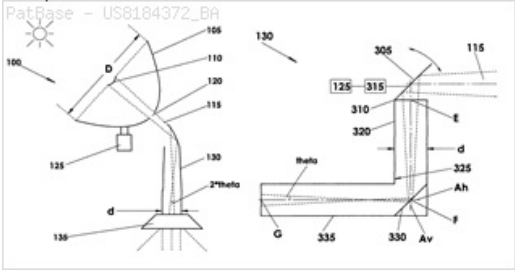
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM 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

Title: LOW NUMERICAL APERTURE (LOW-NA) SOLAR LIGHTING SYSTEM

Abstract: Source: US8184372B [EN] A low numerical aperture (low-NA) light concentration and transmission system collects, concentrates and transmits light for interior illumination. A solar tracker aligns a primary light concentrator to collect light and direct the light to a secondary light concentrator and a filter for removing ultraviolet and infrared radiation. On exiting the secondary light concentrator, the optical axis of the concentrated light is aligned to optimize the numerical aperture of the concentrated light with a numerical aperture (NA) optimizer having a light guide to direct the concentrated light to an interior luminaire. The method of the low numerical aperture transmission of light has the advantages of fewer reflections in the light guide, low loss, low cost, and easy installation and operation.

Classifications:

International (IPC 8-9): G02B17/00 G02B27/00 H01L31/0232
H01L31/042 H01L31/052 H01L31/0525
H01L31/054 (Advanced/Invention)
CPC: G02B19/0033 G02B19/0042 F24J2/067 F24J2/085 F24J2/10
G01S3/781 G01S3/7861 G02B3/08 G02B5/0808 G02B5/10
G02B17/061 G02B27/095 Y02E10/52 F21S11/00 H01L31/0525
G02B17/06 H01L31/054 H01L31/0543 H01L31/0547 H02S40/44
H01L31/058 G02B19/0023
European: G02B17/06 G02B17/06A1 G02B27/09F G02B27/09S2
G02B3/08 G02B5/08C G02B5/10 R24J2/06F R24J2/08B R24J2/10
US: 126/573 126/600 136/246 136/259 359/592 359/597



Family:

Publication number	Publication date	Application number	Application date
US8184372 BA	20120522	US20090584052	20090827
US8339709 BA	20121225	US20120449031	20120417
US8410351 BA	20130402	US20090584050	20090827
US8513515 BA	20130820	US20090584051	20090827
US8952238 BA	20150210	US20130840782	20130315

Priority:

US20080094113P 20080904	US20080094115P 20080904	US20080094117P 20080904
US20080094120P 20080904	US20090584050 20090827	US20090584051 20090827
US20090584052 20090827	US20120449031 20120417	US20130840782 20130315

Probable Assignee: GU BINGWU
Assignee(s): (std): GU BINGWU
Inventor(s): (std): GU BINGWU
Agent(s): GERALD R

Title: WAVE ACTIVATED POWER GENERATION **SYSTEM** WITH THE RACK AND PINION MECHANISM

Abstract: Source: US2014035286A [EN] The present invention is directed to a wave activated power generation **system** that converts the vertical movement of one or more power generation buoys resulting from interaction with waves into energy producing gyrations via a rack and pinion mechanism. The square-shaped power generation buoys are manufactured from fiber-reinforced plastic material.

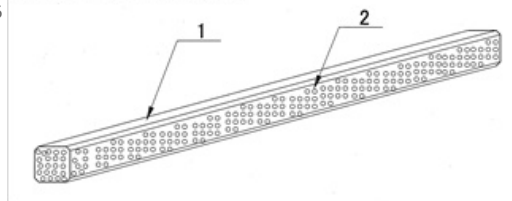
Classifications:

International (IPC 8-9): F03B11/02 F03B13/10 F03B13/12 F03B13/16 F03B13/18 F03B13/20 H02P9/04 (Advanced/Invention); F03B13/18 F03B13/22 (Advanced/Non-invention)

CPC: F03B13/1845 F03B13/10 F03B11/02 F03B13/16 F05B2230/00 F05B2240/40 F05B2280/6012 F05B2280/6013 F03B13/22 F05B2240/95 F03B13/186 F05B2260/30 Y02E10/38

US: 290/42 290/53 60/497 60/507

PatBase - US2014035286_AA



Family:

Publication number	Publication date	Application number	Application date
DE602013028801 D1	20171214	DE201360028801T	20130801
EP2880304 A2	20150610	EP20130779339	20130801
EP2880304 B1	20171101	EP20130779339	20130801
EP3027888 A1	20160608	EP20130828928	20131221
US2014035286 AA	20140206	US20120566730	20120803
US2015176562 AA	20150625	US20140474572	20140902
US2016177910 AA	20160623	US20130909151	20131221
US8912678 BB	20141216	US20120566730	20120803
US9683543 BB	20170620	US20140474572	20140902
US9810194 BB	20171107	US20130909151	20131221
WO14020417 A2	20140206	WO2013IB01693	20130801
WO14020417 A3	20140417	WO2013IB01693	20130801
WO15015245 A1	20150205	WO2013IB02851	20131221

Priority:

EP20130779339 20130801 US20120566730 20120803 WO2013IB01693 20130801
 WO2013IB02851 20131221 US20140474572 20140902

Probable Assignee: NOZAWA TSUKASA

Assignee(s): (std): NOZAWA TSUKASA

Inventor(s): (std): NOZAWA TSUKASA

Agent(s): PUSCHMANN BORCHERT BARDEHLE PATENTANWALTE PARTNERSCHAFT MBB; PUSCHMANN BORCHERT BARDEHLE PATENTANWALTE PARTNERSCHAFT MBB; JUAN CARLOS A; BACON AND THOMAS PLLC; MARQUEZ IP LAW OFFICE PLLC

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 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

Title: WATER SUPPLY

Abstract: Source: US2003174450A [EN] According to the present invention, in a water supply **apparatus** which converts output power of a **solar** cell with an inverter to drive a **motor** pump for pumping up water, a DC brushless **motor** having no sensor for detecting a position of a rotatable shaft is used as a **motor** for driving the pump. Further, the water supply **apparatus** having a pump and a frequency converter for supplying electric power to the pump and controlling a rotational **speed** of the pump comprises a standard current value table in which rotational frequencies of the pump and standard current values as criteria for shutoff operation at the rotational frequencies are associated with each other, rotational frequency detecting means for detecting a rotational frequency of the pump, standard current value acquiring means for acquiring a standard current value corresponding to the rotational frequency detected by the rotational frequency detecting means with reference to the standard current value table, current detecting means for detecting a current value supplied to the pump, and comparing means for comparing the current value detected by the current detecting means with the standard current value acquired by the standard current value acquiring means.

Classifications:

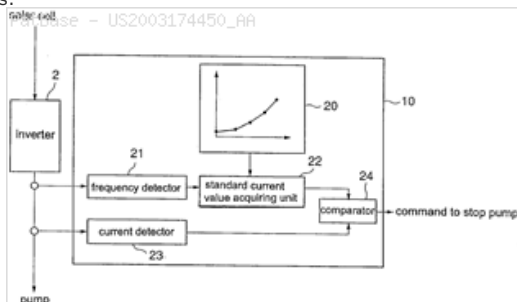
International (IPC 8-9): E03B3/08 E03B5/04 F04B17/00 F04B23/02 F04B47/06 F04B49/00 F04B49/02 F04B49/06 F04B49/10 F04D15/00 H01L31/04 H02P27/06 H02P6/18 (Advanced/Invention); H02P6/18 (Advanced/Non-invention); E03B3/00 E03B5/00 F04B17/00 F04B23/00 F04B47/00 F04B49/00 F04B49/06 F04B49/10 F04D15/00 H01L31/04 H02P27/04 H02P6/14 (Core/Invention); H02P6/14 (Core/Non-invention)

International (IPC 1-7): E03B3/08 E03B5/04 F04B047/06 F04B049/02 F04B049/06 F04B049/10 F04B23/02 F04B47/06 F04B49/00 F04B49/02 F04B49/06 F04B49/10 F04D015/00 F04D15/00 H01L31/04 H02H5/04 H02M3/24 H02P6/18 H02P7/63

CPC: Y02E10/50 Y10S323/906 F04D15/0236 F04B17/006 F04B47/06 F04D13/068

European: F04B17/00S F04B47/06 Y02E10/50

US: 318/268 318/801 323/906 361/31 363/95 363/97



Family:

Publication number	Publication date	Application number	Application date
AU2001269448 AA	20020121	AU20010269448	20010705
AU2001269448 BB	20041118	AU20010269448	20010705
AU200169448 A1	20020121	AU20010069448	20010705
AU200169448 A5	20020121	AU20010069448D	20010705
BRPI0112491 A	20031125	BR2001PI12491	20010705
BRPI0112491 B1	20110920	BR2001PI12491	20010705
JP2002021736 A2	20020123	JP20000206561	20000707
JP2002195163 A2	20020710	JP20000391557	20001222
JP3883382 B2	20070221	JP20000391557	20001222
US2003174450 AA	20030918	US20030332197	20030519
US6922348 BB	20050726	US20030332197	20030519
WO0204813 A1	20020117	WO2001JP05833	20010705

Priority:

JP20000206561 20000707 JP20000391557 20001222 WO2001JP05833 20010705

Probable Assignee: EBARA CORP

Assignee(s): (std): EBARA CORP ; EBARA DENSAN LTD ; NAKAJIMA KAORU ; KAJIWARA KENICHI ; KAWAI MASAHITO ; KISHI MASAHIKO ; HIGAKI NOBUHIRO ; MURAI YUKIO

Inventor(s): (std): HIGAKI NOBUHIRO ; KAJIWARA KENICHI ; KAWAI MASAHITO ; KAWAI MASATO ; KISHI MASAHIKO ; MURAI YUKIO ; NAKAJIMA KAORU

Inventor(s): YUKIO MURAI ; NOBUHIRO HIGAKI ; MASAHITO KAWAI ; MASAHIKO KISHI ; KENICHI KAJIWARA ; KAORU NAKAJIMA

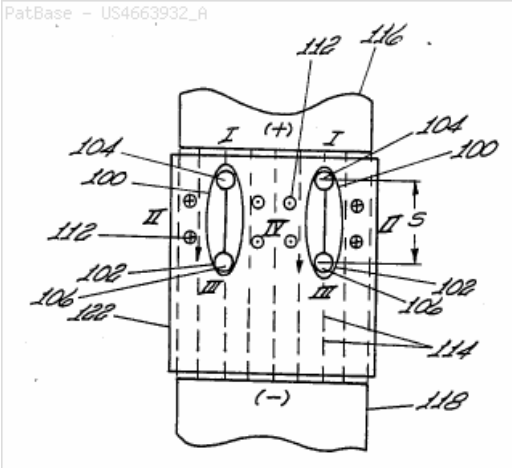
Agent(s): PHILLIPS ORMONDE FITZPATRICK; WENDEROTH LIND AND PONACK LLP

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 GR GW HR HU ID IE IL IN IS IT KE KG KP KR KZ LC 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

Title: DIPOLAR FORCE FIELD PROPULSION SYSTEM

Abstract: Source: US4663932A [EN] A dipolar force field propulsion system having an alternating electric field source for producing electromotive lines of force which extend in a first direction and which vary at a selected frequency and having an electric field strength of a predetermined magnitude, a source of an alternating magnetic field having magnetic lines of force which extend in a second direction which is at a predetermined angle to the first direction of the electromotive lines of force and which cross and intercept the electromotive line of force at a predetermined location defining a force field region and wherein the frequency of the alternating magnetic field substantially equal to the frequency of the alternating electric field and at a selected in phase angle therewith and wherein the magnetic field has a flux density which when multiplied times the selected frequency is less than a known characteristic field ionization potential limit; a source of neutral particles of matter having a selected dipole characteristic and having a known characteristic field ionization potential limit which is greater than the magnitude of the electric field and wherein the dipoles of the particles of matter are capable of being driven into cyclic rotation at the selected frequency by the electric field to produce a reactive thrust, a vaporizing stage which vaporizes said particles of matter into a gaseous state at a selected temperature, and a transporting system for transporting the vaporized particles of matter into the force field defined by the crossing electromotive lines of force and the magnetic lines of force.

Classifications:
International (IPC 8-9): F03H99/00 H02K44/02 (Advanced/Invention); F03H99/00 H02K44/00 (Core/Invention)
International (IPC 1-7): F03H5/00 G21K1/00
CPC: Y10S505/902 Y10S505/909 Y10S376/909 Y10S376/91
F03H99/00 H02K44/02
European: F03H99/00 H02K44/02
US: 250/251 313/359.1 315/5.41 315/501 328/233 376/318 376/909 376/910 505/902 505/909 60/200.1 60/202 60/203.1



Family:

Publication number	Publication date	Application number	Application date
US4663932 A	19870512	US19820401526	19820726
US4891600 A	19900102	US19870045040	19870430

Priority:

US19820401526 19820726 US19870045040 19870430

Probable Assignee: COX JAMES E
Assignee(s): (std): COX JAMES E
Inventor(s): (std): COX JAMES E

Title: Internal combustion engine

Abstract: Source: US4215659A [EN] An internal combustion engine of the gasoline or diesel reciprocating piston type wherein the fuel and air are fed into the combustion chamber in the sequence: (1) fuel is fed into the combustion chamber first, and (2) air (preferably compressed air) is then fed into the combustion chamber. This sequence provides both physical and chemical combustion process advantages and can be used in either gasoline or diesel engines of either the 2-stroke or 4-stroke type as well as in applicant's modified 2-stroke type engine.

Classifications:

International (IPC 8-9): B60K6/08 B60K6/12 B60T1/08 B60T1/10 F01B17/02 F01C1/344 F01C11/00 F01K21/04 F01K23/10 F01K23/16 F02B1/08 F02B25/14 F02B3/08 F02B33/36 F02B41/00 F02B47/06 F02C1/10 F02C3/055 F02C5/00 F02C7/141 F02C7/18 F02M31/06 F16D57/02 (Advanced/Invention); F02B1/04 F02B3/06 F02B55/14 F02B75/02 (Advanced/Non-invention); B60K6/00 B60T1/00 F01B17/00 F01C1/00 F01C11/00 F01K21/00 F01K23/00 F01K23/10 F02B1/00 F02B25/00 F02B3/00 F02B33/00 F02B41/00 F02B47/00 F02C1/00 F02C3/00 F02C5/00 F02C7/16 F02M31/02 F16D57/00 (Core/Invention); F02B1/00 F02B3/00 F02B55/00 F02B75/02 (Core/Non-invention)

International (IPC 1-7): B60K7/00 C07D307/92 F01K15/00 F01K15/02 F01K25/00 F02B33/00 F02B41/00 F02B75/00 F02C3/04 F02C3/20 F02C5/00 F02C5/02 F04C29/00 F16K27/00

CPC: F02C5/00 F02C7/18 F02C1/10 F02C7/141 Y02T50/675

F02B1/08 F02B2075/027 F02B55/14 F02C3/055 F02G2250/03

F01C1/3441 F01C1/3446 F01C11/004 F01K21/047 F01K23/10

F01K23/16 B60K6/08 B60K6/12 B60T1/08 B60T1/10 F01B17/02

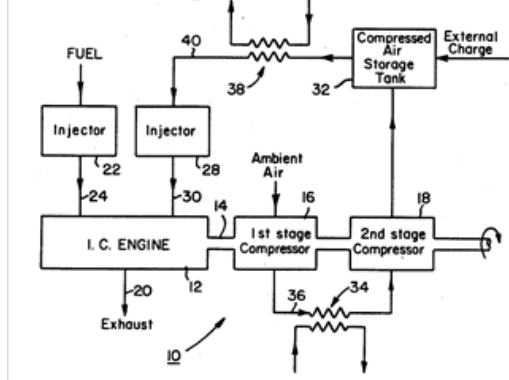
F16D57/02 Y02T10/6208 F02B47/06 Y02T10/121 F02B25/14

F02B1/04 F02B3/06 F02B3/08 F02B33/36 F02B41/00 F02D2200/0606 F02M31/066 Y02T10/126

European: B60K6/08 B60K6/12 B60T1/08 B60T1/10 F01B17/02 F01C1/344B F01C1/344C F01C11/00B2 F01K21/04E F01K23/10 F01K23/16 F02B1/08 F02B25/14 F02B3/08 F02B33/36 F02B41/00 F02B47/06 F02C1/10 F02C3/055 F02C5/00 F02C7/141 F02C7/18 F02M31/06D F16D57/02 R02B1/04 R02B3/06 R02B55/14 R02B75/02S4 R02D200/0606 R02G250/03 Y02T10/62D Y02T50/67F

US: 123/26 123/302 123/316 123/39 123/68 180/165 180/301 60/39.181 60/39.460R 60/39.461 60/39.511 60/39.76 60/414 60/668 60/682 60/68Z 60/713

PatBase - US4215659_A



Family:

Publication number	Publication date	Application number	Application date
EP0016105 A1	19801001	EP19790900800	19800212
EP0016160 A1	19801001	EP19790900904	19800225
EP0018384 A1	19801112	EP19790900565	19791217
US4215659 A	19800805	US19780961264	19781116
US4228659 A	19801021	US19780908155	19780522
US4230075 A	19801028	US19780972786	19781226
US4238925 A	19801216	US19780941298	19780911
US4240381 A	19801223	US19790037161	19790508
US4290268 A	19810922	US19780942820	19780915
US4300486 A	19811117	US19790029884	19790413
WO7901071 A1	19791213	WO1979US00324	19790514
WO8000170 A1	19800207	WO1979US00318	19790514
WO8000237 A1	19800221	WO1979US00518	19790718

Priority:

US19780879969 19780221	US19780890465 19780327	US19780908155 19780522
US19780905631 19780515	US19780906035 19780515	US19780920445 19780629
US19780947998 19781002	US19780970320 19781218	US19780955896 19781030
US19780951383 19781016	US19780961264 19781116	US19780941298 19780911
US19780942820 19780915	US19780926237 19780720	US19790037161 19790508
US19790029884 19790413	US19780972786 19781226	

Probable Assignee:

PURIFICATION SCIENCES INC

Assignee(s): (std):

PURIFICATION SCIENCES INC

Inventor(s): (std):

LOWTHER F ; LOWTHER FRANK E

Designated states:

AT BR CH DE FR GB JP LU SE

Title: MULTIPURPOSE UTILITY STRUCTURE

Abstract: Source: US2013199516A [EN] A **system** and method of creating and operating a utility structure coupled to a second structure is provided. A utility structure can include a renewable **energy source**, a control **system**, water heating **system**, a communications **system**, and a **solar** hot air module. In connection with these features, a utility structure can provide utility access, heated and/or cooled water, and HVAC to the connected structure. A utility structure can be free standing, portable, or attached to another structure.

Classifications:

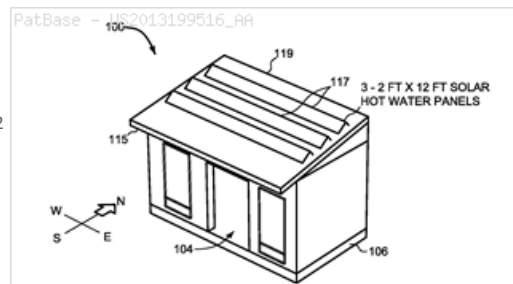
International (IPC 8-9): E04C2/52 E04H1/00 F24J2/04

F24J2/52 (Advanced/Invention)

CPC: F24D5/02 F24D5/12 F24D11/003 F24D19/1045 F24D19/1093 F24D3/08 F24D5/04 F24D11/004 F24D12/00 F24D15/02 F24D15/04 F24D19/1078 F24D2200/02 F24D2200/04 F24D2200/08 F24D2200/12 F24D2200/14 F24H2240/01 F24H2240/09 F24J2/04 F24J2/38 Y02B10/20 Y02B10/70 Y02E10/44 Y02E10/47 E04H1/00 F24J2/0422 F24J2/523 Y02B30/12

European: F24J2/04 F24J2/38 F24J2/52A8 Y02B10/20

US: 126/628 126/633 52/16 52/79.1



Family:

Publication number	Publication date	Application number	Application date
US2013199516 AA	20130808	US20130830167	20130314
WO12037291 A2	20120322	WO2011US51652	20110914
WO12037291 A3	20140327	WO2011US51652	20110914

Priority:

US20100382798P 20100914 US20100389624P 20101004 WO2011US51652 20110914
US20130830167 20130314

Probable Assignee: GLOBAL SOLAR WATER AND POWER SYSTEMS INC

Assignee(s): (std): GLOBAL SOLAR WATER AND POWER SYSTEMS INC ; SNYDER MARK ; SYSTEM INC GLOBAL SOLAR WATER AND POWER

Inventor(s): (std): SNYDER MARK ; SNYDER MARK E

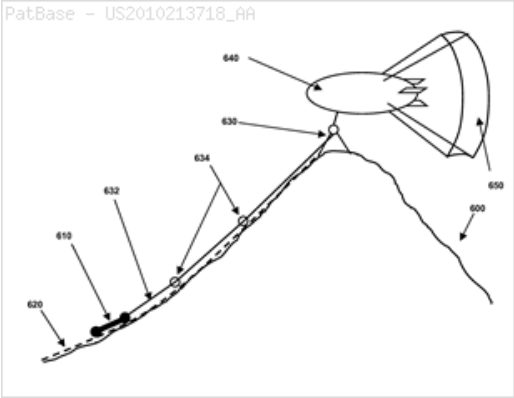
Agent(s): DELANEY KAROLINE A

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 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

Title: RECIPROCATING **SYSTEM** WITH BUOYANT AIRCRAFT, SPINNAKER SAIL, AND HEAVY CARS FOR GENERATING ELECTRIC POWER

Abstract: Source: US2010213718A [EN] An electric generating **system** uses a zeppelin filled with helium or hydrogen, and a spinnaker sail, to provide pulling power that will lift a heavy railcar to an elevated height on a track, such as on a hill or mountainside, or in an elevator-type shaft in a tall building. When the heavy car reaches the top of the track, it is released, and its descent drives an electric generator. The generator can be carried by the car, and can send the power to batteries on the car, or to conductive rails. Alternately, if the car is inert weight, cables can drive stationary generators. The zeppelin will be inflated and deflated repeatedly, using equipment to recapture energy during each gas expansion, to help drive subsequent recompression into high-pressure tanks. The spinnaker sail will use a cable-handling **device** and spreader bars to deploy the sail and keep it at an elevated height. Various advantages are provided compared to wind turbines and pumped-storage hydroelectric facilities.

Classifications:
International (IPC 8-9): F02B63/04 F03D9/00 (Advanced/Invention); F03D9/00 (Core/Invention)
CPC: F03D5/06 F03D9/11 F03D5/04 F05B2240/921 F05B2240/922 F05B2240/98 Y02B10/30 Y02E10/70 Y02E10/72
European: F03D5/04 F03D5/06 F03D9/02B R05B240/921 R05B240/922 R05B240/98 Y02B10/30 Y02E10/70 Y02E10/72
US: 290/1.00R 290/1R 290/44 290/55 290/55P



Family:

Publication number	Publication date	Application number	Application date
US2010213718 AA	20100826	US20090390503	20090223
US2012049533 AA	20120301	US20110217873	20110825
US8018079 BB	20110913	US20090390503	20090223

Priority:
US20090390503 20090223 US20110217873 20110825

Probable Assignee: TETRAHEED LLC

Assignee(s): (std): KELLY PATRICK D ; TETRAHEED LLC

Inventor(s): (std): KELLY PATRICK D

Agent(s): PATRICK D KELLY; PATRICK D

Title: SHROUDED WIND TURBINE **SYSTEM** WITH YAW CONTROL

Abstract: Source: US2008150292A [EN] A wind energy **systems** includes a shroud for each turbine. The shroud is adapted to direct and accelerate wind towards the turbine. A strong adaptable support assembly is provided for securing turbines to a structure. An air glide yaw assembly facilitates rotational movement of the structure allowing the turbines to face oncoming wind. The turbine blades are optimized for use with a shroud.

Classifications:

International (IPC 8-9): F03D1/00 F03D1/04 F03D11/00 F03D11/04 F03D3/04 F03D7/02 F03D7/04 F03D9/00

F03D9/02 (Advanced/Invention);

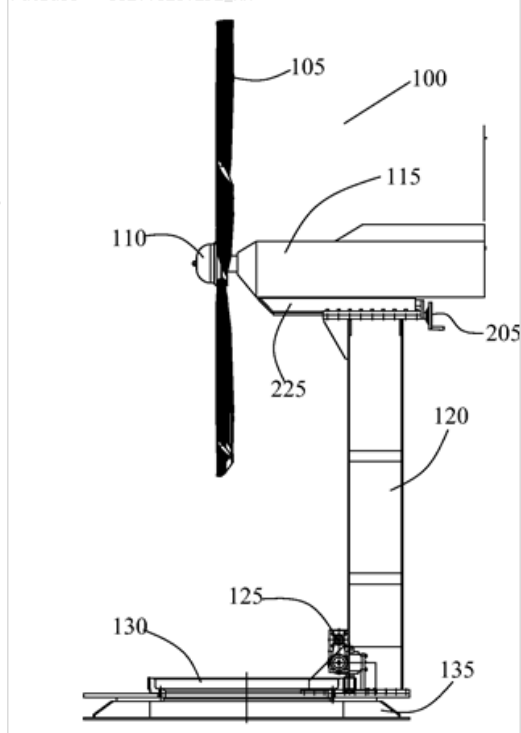
F03D1/00 F03D11/00 F03D7/00 F03D9/00 (Core/Invention)

CPC: Y02E10/72 F03D7/0204 Y02E10/723 F03D1/04 F05B2240/133 Y02E10/725 Y02E10/726 F05B2250/323 F05B2250/324 F05B2250/502

European: F03D1/04 F03D7/02B R05B240/133 Y02E10/72F Y02E10/72H

US: 1/1 290/44 290/44S 290/55 290/55P 415/118 415/118S 415/126 415/14 415/14S 415/182.1 415/220 415/30 415/4.3 415/4.5 415/4.500P 416/170R 416/189 416/244R 416/44 416/61 416/9

PatBase - US2008150292_AA



Family:

Publication number	Publication date	Application number	Application date
US2008150292 AA	20080626	US20070845094	20070827
US2012183387 AA	20120719	US20120431206	20120327
US2012261925 AA	20121018	US20120485227	20120531
US2013175804 AA	20130711	US20130777360	20130226
US8257019 BB	20120904	US20070845094	20070827
US8794903 BB	20140805	US20120431206	20120327
US9194362 BB	20151124	US20120485227	20120531
WO09029691 A1	20090305	WO2008US74532	20080827
WO14134032 A1	20140904	WO2014US18301	20140225

Priority:

US20060871135P 20061221 US20070845094 20070827 US20120431206 20120327
US20120485227 20120531 US20130777360 20130226

Probable Assignee: WIND ENERGY TECHNOLOGIES LLC

Assignee(s): (std): CIRONI MARK ; CIRONI MARK L ; FEDOR JOHN ; FEDOR JOHN W ; GREEN ENERGY TECHNOLOGIES INC ; GREEN ENERGY TECHNOLOGIES LLC ; MERLINI III NICHOLAS C

Assignee(s): WIND ENERGY TECHNOLOGIES LLC

Inventor(s): (std): CIRONI MARK ; CIRONI MARK L ; FEDOR JOHN ; FEDOR JOHN W ; MERLINI III NICHOLAS C

Agent(s): MARK YOUNG PA; TUCKER ELLIS LLP; YOUNG MARK; HUDZINKSKI MICHAEL E

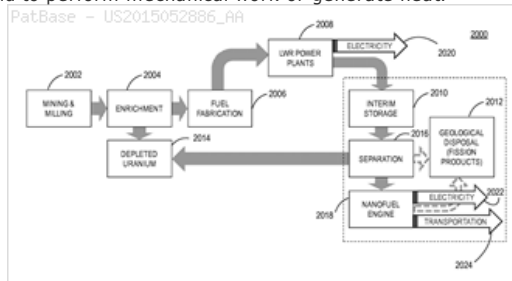
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM 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

Title: NANOFUEL ENGINE **APPARATUS** AND NANOFUEL

Abstract: Source: US2015052886A [EN] A nanofuel engine including receiving nanofuel (including moderator, nanoscale molecular dimensions and molecular mixture) internally in an internal combustion engine that releases nuclear energy, is set forth. A nanofuel chemical composition of fissile fuel, passive agent, and moderator. A method of obtaining transuranic elements for nanofuel including: receiving spent nuclear fuel (SNF); separating elements from SNF, including a stream of elements with $Z > 92$, fissile fuel, passive agent, fertile fuel, or fission products; and providing elements. A method of using transuranic elements to create nanofuel, including: receiving, converting, and mixing the transuranic elements with a moderator to obtain nanofuel. A method of operating a nanofuel engine loaded with nanofuel in spark or compression ignition mode. A method of cycling a nanofuel engine, including compressing nanofuel; igniting nanofuel; capturing energy released in nanofuel, which is also the working fluid; and using the working fluid to perform mechanical work or generate heat.

Classifications:

International (IPC 8-9): F01C21/08 F02B27/02 F02B53/00
F02B53/02 F02B53/10 F02B53/12 F02B55/14 F02B69/00 F02B69/02
F02P23/04 G21C1/32 G21C19/42 G21C3/42 G21C5/12
G21D5/02 (Advanced/Invention);
B63G8/08 B64G1/40 (Advanced/Non-invention)
CPC: G21D5/02 F02B53/02 F02B53/12 F02B53/10 F02B55/14
F02P23/04 F02B2053/005 G21C5/12 F01C21/08 B63G8/08
B64G1/408 F02B37/00 G21C1/32 G21C3/42 G21C19/42 Y02E30/37
Y02E30/38 Y02T10/144 G21C3/44
US: 252/637 376/317 60/508 60/512



Family:

Publication number	Publication date	Application number	Application date
US2015052886 AA	20150226	US20130974045	20130823
US2017069402 AA	20170309	US20160167900	20160527
US9881706 BB	20180130	US20130974045	20130823
WO15026878 A1	20150226	WO2014US51769	20140820

Priority:

US20130974045 20130823 US20150167278P 20150528 US20160167900 20160527
WO2014US41769 20140820 WO2014US51769 20140820

Probable Assignee: GLOBAL ENERGY RESEARCH ASSOCIATES LLC

Assignee(s): (std): GLOBAL ENERGY RES ASS LLC ; GLOBAL ENERGY RES ASSOCIATES LLC

Assignee(s): GLOBAL ENERGY RESEARCH ASSOCIATES LLC

Inventor(s): (std): ADAMS MARK ; ADAMS MARK LLOYD

Agent(s): RALPH P; ATFIRM PLLC; ALBRECHT RALPH

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 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 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

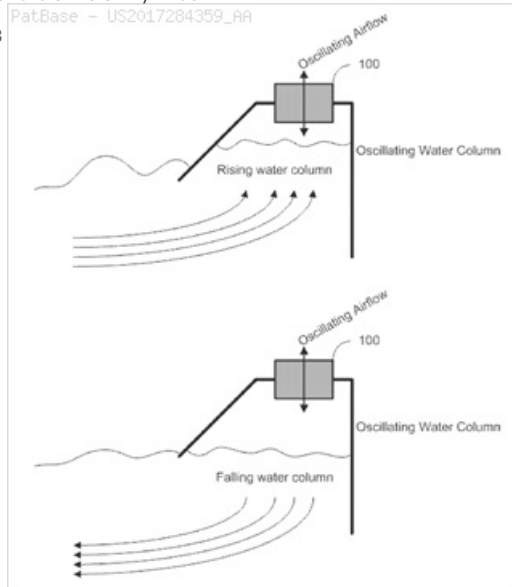
Title: RENEWABLE ENERGY GENERATION BASED ON WATER WAVES

Abstract: Source: US2017284359A [EN] Methods, **systems**, and **devices** are disclosed for wave power generation. In one aspect, a wave power generator **device** includes a stator assembly and a rotor assembly encased within a tube frame. The stator assembly includes an array of inductor coils in a fixed position within a cavity of the tube frame and a plurality of bearings coupled to the tube frame. The rotor assembly includes a turbine rotor having a central hub and peripheral blades coupled to a high inertia annular flywheel that is moveably engaged with the bearings of the stator assembly, and an array of magnets arranged to be evenly spaced and of alternating axial polarity from one another extending from the annular flywheel into the cavity between the array of inductor coils, such that electric currents are produced based on magnetic **field** interaction of the magnets with the inductor coils during the rotation of the annular flywheel.

Classifications:

International (IPC 8-9): F03B13/10 F03B13/12 F03B13/14 F03B13/18 H02K35/02 H02P9/04 (Advanced/Invention)

CPC: F03B13/142 Y02E10/32 Y02E10/38 F03B13/12 F03B13/10 F03B13/1845 H02K35/02 H02P9/04 F03B15/00 F03B13/24 F05B2220/7068



Family:

Publication number	Publication date	Application number	Application date
US2017284359 AA	20171005	US20150514464	20150925
WO16049596 A1	20160331	WO2015US52491	20150925

Priority:

US20140055141P 20140925 US20150514464 20150925 WO2015US52491 20150925

Probable Assignee: EIP TECH INC

Assignee(s): (std): EIP TECH INC ; EIP TECHNOLOGIES INC

Inventor(s): (std): BURKLE STEVE

Agent(s): AI BING

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 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 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

Title: ELECTRIC POWER NETWORK

Abstract: Source: US2007217105A [EN] A **device** for controlling at a fault condition. An **apparatus** is connected by a connection line to a grid point of a transmission net in an electric power network. A voltage raising **apparatus** includes a first branch connected to the grid point including a switching element and a second branch including a current resisting means. The voltage raising **apparatus** includes a computer for signal processing of a sensed fault condition on the network and for affecting the operation of the switching element such that on a fault condition at least part of the current is diverted through the voltage raising **apparatus** and for evaluation of further actions.

Classifications:

International (IPC 8-9): G05D11/00 H02H3/02 H02H3/24 H02H3/247
H02J3/00 H02J3/38 H02P5/00 (Advanced/Invention);

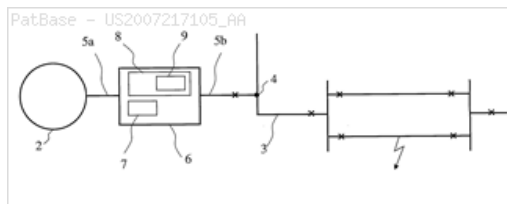
H02H7/06 H02H7/093 (Advanced/Non-invention);
G05D11/00 H02H3/02 H02H3/24 (Core/Invention);
H02H7/06 H02H7/08 (Core/Non-invention)

International (IPC 1-7): H02H3/02

CPC: H02H3/025 H02H7/06 H02H7/093

European: H02H3/02C T02H7/06 T02H7/093

US: 361/18 361/89 361/92 700/298

**Family:**

Publication number	Publication date	Application number	Application date
CA2550884 AA	20060620	CA20042550884	20041222
CN100547871 C	20091007	CN200480038773	20041222
CN1898844 A	20070117	CN200480038773	20041222
EP1706927 A1	20061004	EP20040809176	20041222
IN02277CN2006 A	20070608	IN2006CN02277	20060622
JP2007516690 T2	20070621	JP20060546921T	20041222
JP4546486 B2	20100915	JP20060546921T	20041222
SE200303574 A0	20031223	SE20030003574	20031223
US2007217105 AA	20070920	US20040584211	20041222
US7447568 BB	20081104	US20040584211	20041222
WO05062438 A1	20050707	WO2004SE02003	20041222

Priority:

SE20030003574 20031223 WO2004SE02003 20041222

Probable Assignee: ABB RESEARCH LTD

Assignee(s): (std): ABB CORPORATE RESEARCH LTD ; ABB RESEARCH LTD ; CHRISTENSEN HANS CHRISTIAN ; GERTMAR LARS ; KOLDBY NIELSEN ERIK ; LINDAHL STURE ; MANTERE JUHANI ; WRAAE LEIF ERIK

Assignee(s): KOLBY NIELSEN ERIK

Inventor(s): (std): CHRISTIAN CHRISTENSEN HANS ; ERIK KOLDBY NIELSEN ; GERTMAR LARS ; JUHANI MANTERE ; KOLBY NIELSEN ERIK ; KOLDBY NIELSEN ERIK ; LARS GERTMAR ; LEIF CHRISTENSEN HANS CHRISTIA ; LINDAHL STURE ; MANTERE JUHANI ; NIELSEN ERIK KOLDBY ; STURE LINDAHL ; WRAAE LEIF ERIK ; CHRISTENSEN HANS C ; CHRISTENSEN HANS CHRISTIAN

Inventor(s): CHRISTENSEN HANS CHRISTIAN GERTMAR LARS ; CHRISTENSEN HANS

Agent(s): MARKS AND CLERK; VENABLE LLP; FRANKLIN ERIC J; ERIC J

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 KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA 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

Title: PHASE CHANGE ASSISTED HEAT SINK

Abstract: Source: US2002024221A [EN] In an electric vehicle, the traction **motor** is driven from a battery by way of a controllable electric power switcher. In operation of the switcher, the power losses of the switches depends upon the power being handled; during acceleration the power is high, and at constant **speed** on level ground the power is small. Thus, the power "dissipated" by the switches varies with time. A cooler transfers heat from the switcher. During acceleration, the cooler may not be sufficient to limit the instantaneous switch temperature. A phase-change heat "sink" coupled to the switches absorbs heat from the switches during hard acceleration, and returns the heat to the cooler under more constant **speed** conditions.

Classifications:

International (IPC 8-9): B60K6/04 B60K6/46 B60L11/12 B60W10/08 B60W10/26 H05K7/20 (Advanced/Invention); B60K11/00 F01P1/06 F01P3/22 (Advanced/Non-invention); B60K6/00 B60L11/02 B60W10/08 B60W10/26 H05K7/20 (Core/Invention); B60K11/00 F01P1/00 F01P3/22 (Core/Non-invention)

International (IPC 1-7): B60K11/00 H02P9/00

CPC: B60K6/46 B60K11/00 B60K2001/003 B60L11/12 B60L2270/44 B60W10/06 B60W10/26 B60W20/00 B60W2510/244 F01P1/06 F01P2003/2278 F01P2050/24 F01P2050/30 H05K7/20 Y02T10/6217 Y02T10/6286 Y02T10/7077 B60W20/15 Y02T10/7005 B60W10/08 H02K7/006 H02K9/005 H02K9/19 H02K9/20 H02K2209/00

European: B60K6/04D4 B60K6/04D6 B60K6/04H2 B60K6/46 B60L11/12 B60W10/06 B60W10/08 B60W10/26 B60W20/00 H05K7/20 L60K1/00B L60K11/00 L60L270/44 L60W510/24A2 R01P1/06 R01P3/22H R01P50/24 R01P50/30 Y02T10/62F2 Y02T10/62J Y02T10/70B Y02T10/70J2

US: 123/41.01 290/1.00B 290/1B 290/40 290/40.00C 290/40.00CP 290/40C 361/700 903/925 903/942 903/943

PatBase - US2002024221_AA

Patent Application Publication Feb. 28, 2002 Sheet 1 of 10 US 2002/0024221 A1

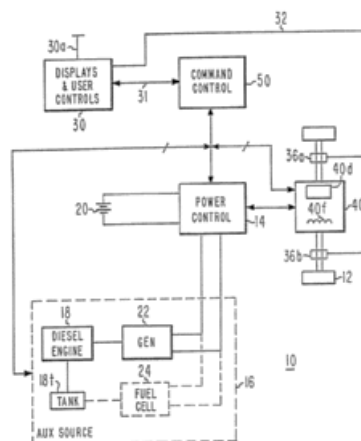


Fig. 1

Family:

Publication number	Publication date	Application number	Application date
US2002024221 AA	20020228	US20010820399	20010329
US6239502 BA	20010529	US19990444097	19991122
US6417577 BA	20020709	US20010820399	20010329

Priority:

US19990444097 19991122 US20010820399 20010329

Probable Assignee: BAE SYSTEMS CONTROLS INC

Assignee(s): (std): BAE SYSTEMS CONTROLS

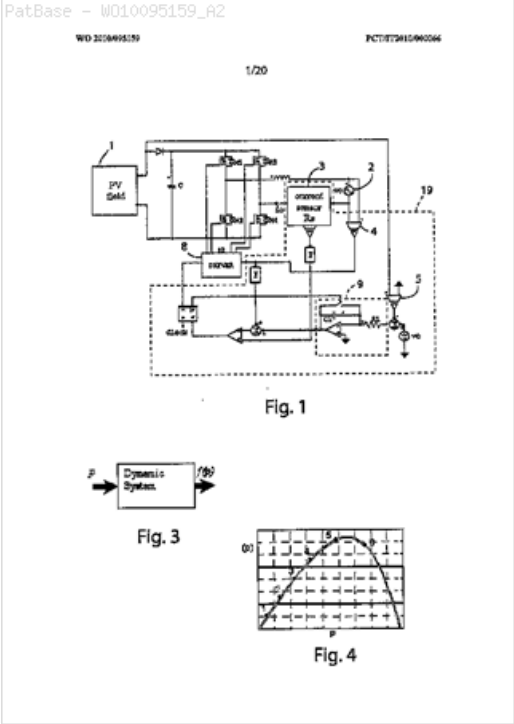
Assignee(s): BAE SYSTEMS CONTROLS INC ; GREWE TIMOTHY MICHAEL ; LOCKHEED MARTIN CORP ; OSOVSKI STEVE WILLIAM

Inventor(s): (std): OSOVSKI STEVE WILLIAM ; GREWE TIMOTHY MICHAEL

Title: METHOD FOR CONTROLLING AN **ELECTRIC POWER GENERATION SYSTEM** BASED ON **ENERGY SOURCES**, IN PARTICULAR RENEWABLE **ENERGY SOURCES**, AND RELATED CONTROLLER **DEVICE**

Abstract: The present invention concerns a method, and the related controller **device**, for controlling an **electric power generation system**, based on at least one **energy source**, in particular a renewable **energy source**, preferably a **photovoltaic** or fuel cell source, said **system** operating according to operating performance representable by at least one performance indicative function (P;?P) having at least one optimal value (P target), operation of said **system** being dependent on at least two controllable parameters (Vc, K;?cmd, beta), the method perturbing the values of said at least two controllable parameters (Vc, K;?cmd, beta), so as to perturb a first controllable parameter (X; Y) with a same perturbation sign (SX) as long as it is detected that, after each single perturbation, a distance of a value of said at least one performance indicative function (P;?P) from said at least one optimal value (Ptarget) decreases, whereas when it is detected that said distance increases, the method passes to perturb a different controllable parameter (Y) with a perturbation sign (SY) opposite to the sign of the immediately preceding perturbation of such different controllable parameter (Y).

Classifications:
International (IPC 8-9): G05F1/67 (Advanced/Invention)
CPC: G05F1/67 Y02E10/58
European: G05F1/67 Y02E10/58



Family:

Publication number	Publication date	Application number	Application date
DE602010005122 D1	20130418	DE201060005122T	20100222
EP2399179 A2	20111228	EP20100711745	20100222
EP2399179 B1	20130220	EP20100711745	20100222
ES2405685 T3	20130603	ES20100711745T	20100222
ITSA20090004 A1	20100821	IT2009SA00004	20090220
WO10095159 A2	20100826	WO2010IT00066	20100222
WO10095159 A3	20101014	WO2010IT00066	20100222

Priority:

EP20100711745 20100222 IT2009SA00004 20090220 WO2010IT00066 20100222

Probable Assignee: UNIV DEGLI STUDI SALERNO

Assignee(s): (std): EGIZIANO LUIGI ; FEMIA NICOLA ; PETRONE GIOVANNI ; SPAGNUOLO GIOVANNI ; VITELLI MASSIMO ; UNIV DEGLI STUDI SALERNO

Assignee(s): UNIVERSITA DEGLI STUDI DI SALERNO

Inventor(s): (std): EGIZIANO LUIGI ; FEMIA NICOLA ; PETRONE GIOVANNI ; SPAGNUOLO GIOVANNI ; VITELLI MASSIMO

Agent(s): SCILLETTA ANDREA; DE ELZABURU ALBERTO; SCILLETTA ANDREA 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 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 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

Title: ELECTRIC POWER CONVERTER AND METHOD FOR OPERATING THE SAME

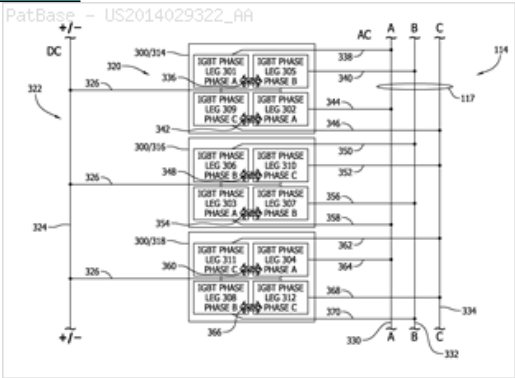
Abstract: Source: US2014029322A [EN] A power converter includes a plurality of semiconductor switching **devices** coupled in a parallel configuration and positioned proximate each other in an interlaced configuration with respect to a plurality of electrical phases. The interlaced configuration facilitates inducing an electric current flow through each semiconductor switching **device** of the plurality of semiconductor switching **devices** that cancels at least a portion of current imbalances between at least a portion of the plurality of semiconductor switching **devices**.

Classifications:

International (IPC 8-9): H02M7/00 H02M7/217
H02M7/48 (Advanced/Invention);
H02M7/493 (Advanced/Non-invention)

CPC: H02M7/003 H02M7/493

US: 1/1 363/127



Family:

Publication number	Publication date	Application number	Application date
US2014029322 AA	20140130	US20120558479	20120726
US9088203 BB	20150721	US20120558479	20120726
WO14018186 A1	20140130	WO2013US46100	20130617

Priority:

US20120558479 20120726

Probable Assignee: GENERAL ELECTRIC CO

Assignee(s): (std): GEN ELECTRIC ; PATE PAUL STEPHEN ; WAGONER ROBERT GREGORY

Assignee(s): GENERAL ELECTRIC CO

Inventor(s): (std): PATE PAUL STEPHEN ; WAGONER ROBERT GREGORY

Agent(s): JAMES; ARMSTRONG TEASDALE LLP; ZHANG DOUGLAS D 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 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 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

Title: RENEWABLE ENERGY STORAGE AND CONVERSION **SYSTEM**

Abstract: Source: US2012217760A [EN] The invention consists of a **system** for generating regulated and controllable AC electricity from renewable sources of energy that are intermittent in their power output. The whole configuration comprises a renewable **energy source** and an appropriate conversion mechanism, an electrolyzer to produce hydrogen from water, a hydrogen storage tank, fuel cells to generate DC electricity using hydrogen as the fuel, and an electromechanical energy conversion **system**, comprising a DC **motor** in series with an AC generator to convert the DC electricity output of the fuel cells to controllable, regulated, harmonics-free AC output, directly connected to the power **system** grid. Other features of the **system** include the capability to modify the **system**, so as to generate electricity from natural gas, propane and hydrogen that was produced by off-peak electricity.

Classifications:

International (IPC 8-9): F02B63/04 F03D9/02 F03G7/08 H02J H02J15/00 H02J3/38 H02J3/42 H02K57/00 H02K7/18

H02P1/16 (Advanced/Invention);

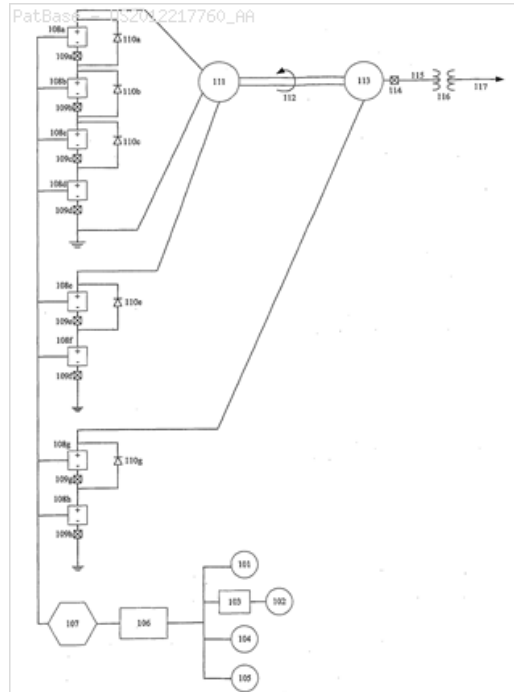
H02J1/00 H02P1/16 (Advanced/Non-invention);

H02J (Subclass/Invention)

CPC: H02J15/00 F05B2220/61 H02J3/386 H02J3/387 H02J3/42 H02J2001/004 Y02E10/725 Y02E10/763 Y02E70/10 Y02E70/20 Y02E70/30 Y02E10/72 F03D9/19

European: F03D9/02 H02J15/00 H02J3/38D1W H02J3/38D2 H02J3/42 R05B220/61 T02J1/00F Y02E10/72 Y02E10/76B Y02E70/10 Y02E70/20 Y02E70/30

US: 290/1.00RP 290/1R



Title: ALTERNATIVE ENERGY GENERATION **SYSTEMS** FOR VEHICLES

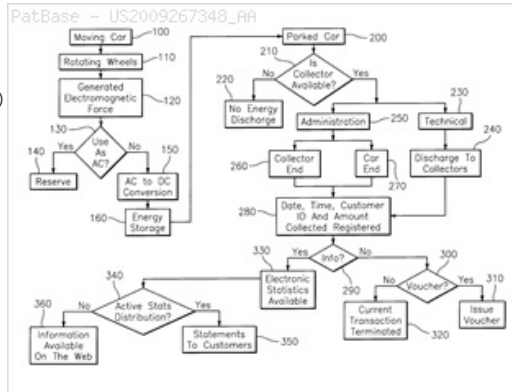
Abstract: Source: US2009267348A [EN] A **system** for generating energy using the rotating wheels of a vehicle and for collecting such energy is provided. An alternative **system** for powering vehicle engines using relatively inexpensive fuel sources is also provided.

Classifications:

International (IPC 8-9): B60K6/20 B60L1/00 B60L11/12 B60L11/16 F02B43/08 G06Q30/00 H01L41/00 H02K7/18 (Advanced/Invention); H02K53/00 (Advanced/Non-invention); B60K6/00 B60L1/00 B60L11/00 B60L11/02 F02B43/00 (Core/Invention)
CPC: Y02E60/721 Y02T90/169 Y04S10/126 Y04S30/14 B60L8/00 B60L7/14 B60L9/00 B60L11/005 B60L11/14 B60L11/16 B60L11/18 B60L11/1816 B60L11/184 B60L11/1842 B60L11/1844 B60L11/1846 B60L11/1848 B60L2220/44 B60L2230/16 B60L2250/20 B60L2260/28 Y02T10/7005 Y02T10/7022 Y02T10/7077 Y02T10/7083 Y02T90/121 Y02T90/128 Y02T90/14 Y02T90/163 B60L7/10 B60L7/06 B60L11/1803 B60L11/1838 G06Q30/0208 Y02T10/7033 Y04S50/14 Y02T10/70 Y02T10/7027 Y02T10/7088 Y02T10/7072

European: B60L11/00B2 B60L11/14 B60L11/16 B60L11/18 B60L11/18C B60L11/18L4 B60L11/18L7A B60L11/18L7J B60L11/18L7J10 B60L11/18L7J2 B60L11/18L7J4 B60L11/18L7J6 B60L11/18L7J8 B60L7/06 B60L7/10 B60L7/14 B60L8/00 B60L9/00 G06Q30/0208 L60L220/44 L60L230/16 L60L250/20 L60L260/28 Y02T10/70B Y02T10/70D Y02T10/70F Y02T10/70F2 Y02T10/70J2 Y02T10/70J2B Y02T10/70J4 Y02T90/12B Y02T90/12L Y02T90/14 Y02T90/16D

US: 123/3 123/3S 180/65.21 180/65.210S 290/1.00AP 290/1A 290/45 290/45P 290/50 290/50S 307/10.1 307/10.100S 415/916 415/916S 705/14.11 705/14.110S 903/909 903/909S



Family:

Publication number	Publication date	Application number	Application date
US2009267348 AA	20091029	US20090428629	20090423
US2010270810 AA	20101028	US20090608197	20091029
WO10123629 A1	20101028	WO2010US26739	20100310

Priority:

US20080047135P 20080423 US20090428629 20090423 US20090608197 20091029

Probable Assignee: LIEBERMANN RAANAN

Assignee(s): (std): LIEBERMANN RAANAN

Assignee(s): ALEXANDER TRUST

Inventor(s): (std): LIEBERMANN RAANAN

Agent(s): BACHMAN AND LAPOINTE PC; KELMACHTER BARRY L

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 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

Title: **SYSTEMS** AND METHODS FOR TIDAL ENERGY CONVERSION AND ELECTRICAL POWER GENERATION

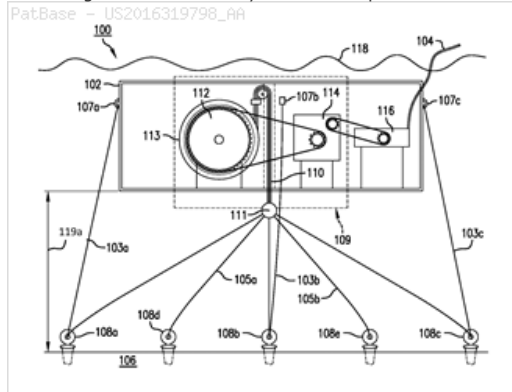
Abstract: Source: US2016319798A [EN] Assemblies **systems**, and methods are disclosed for generating energy from natural forces and, more particularly, to energy generation using tidal action. A tidal energy conversion assembly includes a displacement vessel housing a directional converter that is coupled to an electrical power generator. The tidal energy conversion assembly further includes an anchor cable having a first end, a second end connected to the directional converter, and a length in between the first end and the second end. The anchor cable may be threaded through an anchor at a stationary location, such as a sea floor. The rising, falling, and/or drag forces of the tide cause a change in the length of the anchor cable thus exerting a force on the directional converter. The directional converter converts this force into rotational energy that may be harnessed by the electrical power generator to generate electricity for consumption.

Classifications:

International (IPC 8-9): B63B21/50 B63B35/00 B63B35/44 F03B13/18 F03B13/26 F03B17/06 H02K7/18 (Advanced/Invention)

CPC: F03B13/262 H02K7/1853 B63B35/44 B63B2035/4466 B63B21/50 Y02E10/38 F05B2240/93

US: 290/53



Family:

Publication number	Publication date	Application number	Application date
AU2016257736 AA	20161110	AU20160257736	20160429
CA2983451 AA	20171019	CA20162983451	20160429
CN107850037 A	20180327	CN201680037655	20160429
EP3289214 A2	20180307	EP20160724995	20160429
IN201717038239 A	20180105	IN201717038239	20171027
KR20180004188 A	20180110	KR20177034388	20160429
PH2017501860 A	20180226	PH20170501860	20171011
US2016319798 AA	20161103	US20160143440	20160429
WO16179048 A2	20161110	WO2016US30294	20160429
WO16179048 A3	20161215	WO2016US30294	20160429
WO16179048 A4	20170309	WO2016US30294	20160429

Priority:

US20150155538P 20150501	US20150261565P 20151201	US20160143440 20160429
US20150272759P 20151230	US20160322501P 20160414	WO2016US30294 20160429

Probable Assignee: BIG MOON POWER INC

Assignee(s): (std): BIG MOON POWER INC

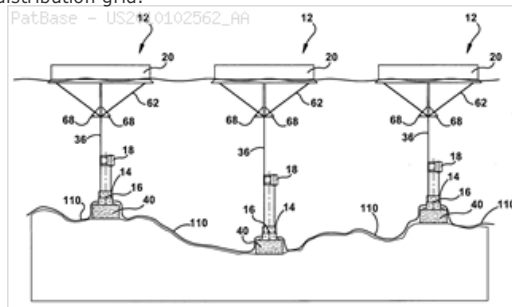
Assignee(s): BLODGETT LYNN ; BAGLEY COLIN

Inventor(s): (std): BLODGETT LYNN ; BAGLEY COLIN

Agent(s): SHELSTON IP PTY LTD; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; KUHNEN AND WACKER; PISTON ROBERT

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 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

US: 290/53 290/53P



Publication number	Publication date	Application number	Application date
AU2009246158 AA	20091119	AU20090246158	20090515
CA2729033 AA	20101222	CA20092729033	20090515
CN102099570 A	20110615	CN200980122451	20090515
EP2313645 A1	20110427	EP20090747696	20090515
EP2313645 A4	20120620	EP20090747696	20090515
JP2011521154 T2	20110721	JP20110509757T	20090515
US2010102562 AA	20110429	US20090466960	20090515
WO09140615 A1	20091119	WO2009US44174	20090515

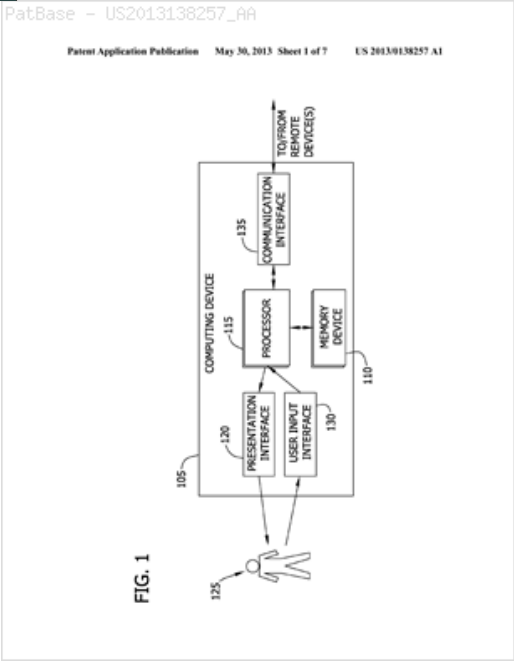
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA 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 UB UG UZ VC VN ZA ZM ZW

Title: **SYSTEM** FOR OPERATING AN ELECTRIC POWER **SYSTEM** AND METHOD OF OPERATING THE SAME

Abstract: Source: US2013138257A [EN] A protection and control **system** for an electric power **system** includes at least one **electric power generation device** and at least one voltage measurement **device**. The **system** also includes at least one memory **device** coupled to the voltage measurement **device**. The memory **device** is configured to store a plurality of voltage measurements of the electric power **system**. The **system** further includes at least one processor coupled in communication with the memory **device**. The processor is programmed to determine a change of voltage induced by an **electric power generation device**, and, determine an approximate location of an electrical fault as a function of the change of voltage induced by the **electric power generation device**.

Classifications:

International (IPC 8-9): G01R31/08 G06F1/28
G06F19/00 (Advanced/Invention)
CPC: F05B2270/107 F05B2270/10711 G01R31/088 F03D7/04
Y02E10/723 G06Q50/06
US: 700/287 702/59



Family:

Publication number	Publication date	Application number	Application date
US2013138257 AA	20130530	US20110307291	20111130

Priority:

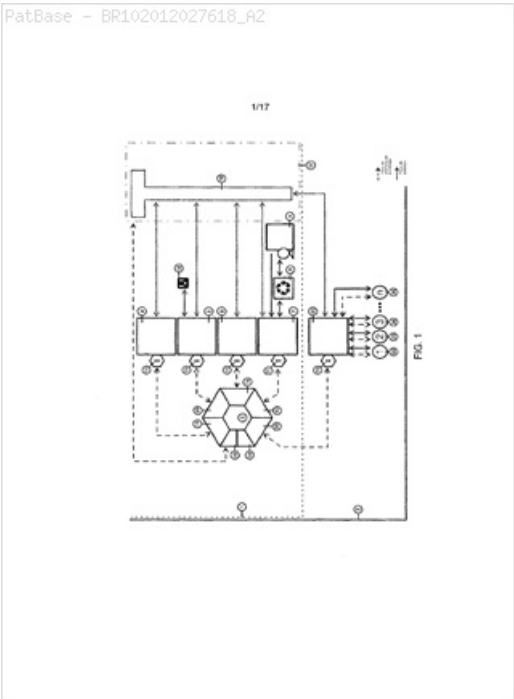
US20110307291 20111130

Probable Assignee: GENERAL ELECTRIC CO
Assignee(s): (std): EDENFELD THOMAS
Assignee(s): GE WIND ENERGY GMBH ; GENERAL ELECTRIC CO
Inventor(s): (std): EDENFELD THOMAS

Title: SISTEMAS INTELIGENTES DE GERENCIAMENTO DE ENERGIA PARA VEICULOS ELETRICO E ELETRICO-HIBRIDO COM CONEXAO BIDIRECIONAL, SISTEMA INTELIGENTE DE GERENCIAMENTO DE ENERGIA PARA UM GERADOR DE ENERGIA, METODO PARA GERENCIAR ENERGIA EM UM SISTEMA INTELIGENTE DE GERENCIAMENTO DE ENERGIA E METODO PARA CONTROLAR O FUNCIONAMENTO DE UM GERADOR DE ENERGIA. INTELLIGENT ENERGY MANAGEMENT SYSTEMS FOR ELECTRIC VEHICLES AND ELECTRIC-HYBRID WITH TWO-WAY CONNECTION, INTELLIGENT POWER MANAGEMENT SYSTEM FOR A POWER GENERATOR, METHOD TO MANAGE ENERGY IN AN INTELLIGENT POWER MANAGEMENT SYSTEM AND METHOD FOR CONTROLLING THE OPERATION OF A POWER GENERATOR. (Machine translation)

Abstract: Source: BR102012027618A [PT] RESUMO Patente de Invencao: "SISTEMAS INTELIGENTES DE GERENCIAMENTO DE ENERGIA PARA VEICULOS ELETRICO E ELETRICO-HIBRIDO COM CONEXAO BIDIRECIONAL, SISTEMA INTELIGENTE DE GERENCIA- MENTO DE ENERGIA PARA UM GERADOR DE ENERGIA, METODO PARA GERENCIAR ENERGIA EM UM SISTEMA INTELIGENTE DE GE- RENCIAMENTO DE ENERGIA E METODO PARA CONTROLAR O FUN- CIONAMENTO DE UM GERADOR DE ENERGIA". A presente invencao refere-se a um sistema inteligente de ge- renciamento de energia para veiculos totalmente eletricos (1) ou eletrico- hibridos (2), que prioriza a regeneracao de energia cinetica em energia ele- trica, composto por unidade de controle principal de energia (3) com controle adaptativo para melhorar eficiencia com rodagem subsequente em rota es- pecifica, sistema embarcado de armazenamento de energia (4), carregador bidirecional para recarregamento do veiculo (5), normal ou por oportunidade, ou fornecimento de energia eletrica a consumidor externo, conversores para o sistema auxiliar (6), com possibilidade de controle de operacao e manu- tencao remotas, uso de dispositivo com tela sensivel ao toque (57) e com disponibilidade de tomadas a bordo para recarregamento de dispositivos pessoais. A presente invencao refere-se ainda a um sistema inteligente de gerenciamento de energia para gerador de energia (22, 23, 24, 25, 69, 84) para geracao distribuida de energia eletrica em modo nao embarcado, bem como um metodo utilizado para gerenciar energia nestes sistemas e um me- todo para controlar o funcionamento de um gerador de energia (22, 23, 24, 25, 69, 84). **Machine translation:** SUMMARY of Invention Patent: "INTELLIGENT ENERGY MANAGEMENT SYSTEMS for ELECTRIC VEHICLES and ELECTRIC-HYBRID with TWO-WAY CONNECTION, INTELLIGENT SYSTEM to MANAGE-ment of ENERGY to a POWER GENERATOR, METHOD to MANAGE ENERGY in an INTELLIGENT SYSTEM of GE-ENERGY and RENCIAAMENTO METHODS to CONTROL the FUN-OPERATION of a POWER GENERATOR." The present invention refers to a clever system of ge-energy renciamento for fully electric vehicles (1) or (2) hybrid-electric, which prioritizes the kinetic energy energy regeneracao he- trica, composed of main power control unit (3) with Adaptive control to improve efficiency with subsequent shooting en route es-specifically, embedded system of energy storage (4) bidirectional charger for recharging the vehicle (5), normal or by chance, or electric power supply the external consumer, converters for the auxiliary system (6), with possibility of operation control and manu-tencao, using device with touch sensitive screen (57) and with availability of taken aboard for recharging of personal devices. The present invention relates to a smart energy management system for power generation (22, 23, 24, 25, 69, 84) for distributed generation of electrical energy in a way not shipped, as well as a method used to manage energy in these systems and a me-all for controlling the functioning of a power generator (22, 23, 24, 25, 69, 84).

Classifications:
International (IPC 8-9): B60W20/10 B60W20/20
G05B19/048 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
BR102012027618 A2	20160920	BR20121027618	20121026

Priority:

BR20121027618 20121026

Probable Assignee: TRACEL VEICULOS ELETRICOS LTDA

Assignee(s): (std): COORDENACAO DOS PROGRAMAS DE POS GRADUACAO DE ENGENHARIA DA UNIVERSIDADE FED DO RIO DE JANEIRO ; TRACEL VEICULOS ELETRICOS LTDA

Assignee(s): COORDENACAO DOS PROGRAMAS DE POS GRADUACAO DE ENGENHARIA DA UNIVERSIDADE FEDERAL DO RIO DE JANEIRO

Inventor(s): (std): CARREIRA EDVALDO DA SILVA ; MIRANDA PAULO EMILIO VALADAO DE

Inventor(s): PAULO EMILIO VALADAO DE MIRANDA ; EDVALDO DA SILVA CARREIRA

Title: VEHICLE INCLUDING POWER STORAGE UNIT

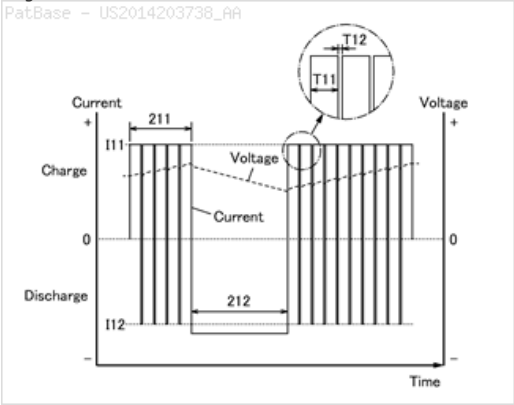
Abstract: Source: US2014203738A [EN] Deterioration of a power storage unit included in a vehicle is prevented or the power storage unit that has deteriorated is repaired, and the charge and discharge performance of the power storage unit is maximized to be maintained for a long time. Attention has focused on a reaction product formed on an electrode surface which causes malfunction or deterioration of a power storage unit such as a lithium-ion secondary battery. In the power storage unit used for a vehicle that runs on the power of an electric motor, rapid discharge occurring in the acceleration of the vehicle or the like tends to promote the solidification of the reaction product. The reaction product is removed by application of an electrical stimulus, specifically, an inversion pulse voltage.

Classifications:

International (IPC 8-9): B60L11/14 B60L11/18 B60L3/00 B60L3/12 B60W10/26 B60W20/00 H01M10/0525 H01M10/42 H01M10/44 H01M4/13 H02J1/10 H02J7/00 H02J7/02 H02J7/04 H02J7/14 H02J7/34 H02P1/00 (Advanced/Invention); B60L3/12 (Advanced/Non-invention)

CPC: H01M10/44 H01M10/441 Y10S903/907 H02J1/102 H02J7/0073 H02J7/1423 H02J7/34 B60L3/0046 B60L3/12 B60L11/1859 B60L11/1862 H01M4/13 H01M10/0525 Y02E60/122 Y02T10/7011 Y02T10/7044 Y02T10/705 Y02T10/7072 Y02T10/7077 Y02T90/14 B60L11/1812 H01M10/425 B60Y2200/92 H01M2010/4271 H01M2220/20 B60L11/1809

US: 180/65.21 318/139 320/104 320/124 320/129 320/130 903/907



Family:

Publication number	Publication date	Application number	Application date
JP2014158414 A2	20140828	JP20140003815	20140113
US2014203738 AA	20140724	US20140154506	20140114
US2017232854 AA	20170817	US20170585787	20170503
US9643501 BB	20170509	US20140154506	20140114
US9895984 BB	20180220	US20170585787	20170503

Priority:

JP20130008726 20130121 JP20140003815 20140113 US20140154506 20140114
US20170585787 20170503

Probable Assignee: SEMICONDUCTOR ENERGY LABORATORY CO LTD

Assignee(s): (std): SEMICONDUCTOR ENERGY LAB

Assignee(s): SEMICONDUCTOR ENERGY LAB CO LTD ; SEMICONDUCTOR ENERGY LABORATORY CO LTD ; SEMICONDUCTOR ENERGY LABORATORY CO

Inventor(s): (std): YAMAZAKI SHUNPEI

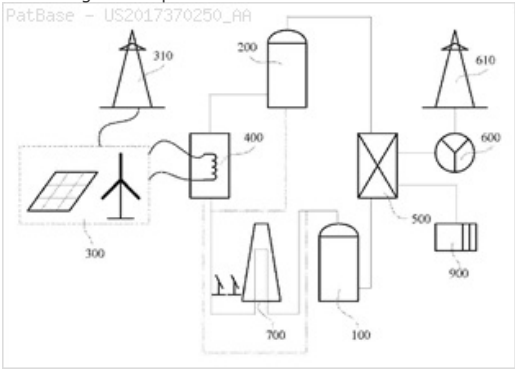
Agent(s): JEFFREY L; NIXON PEABODY LLP

Title: COMBINED ENERGY SUPPLY **SYSTEM** OF WIND, **PHOTOVOLTAIC**, **SOLAR** THERMAL POWER AND MEDIUM-BASED HEAT STORAGE

Abstract: Source: US2017370250A [EN] Disclosed is a combined energy supply **system** of wind, **photovoltaic**, **solar** thermal power and medium-based heat storage, capable of storing the energy which would have been "abandoned wind" and "abandoned light" temporarily in the form of heat by medium-based energy storage. Heat is released during peaks in the power grid to generate power, which serves the function of adjusting the peaks in the power grid. With the medium-based energy storage, unstable **photovoltaic** electric energy can be converted into stable heat energy output when a relatively large fluctuation occurs in wind and **photovoltaic** power generation, and therefore the stable supply of **energy sources** can be guaranteed efficiently. Furthermore, a second heater can also be used for heating the low-temperature media outputted by a first medium tank (**100**), or a third heater is used for heating water in a heat exchanger (**500**), and therefore the energy storage of the medium or the heating efficiency of the heat exchanger is improved.

Classifications:

International (IPC 8-9): F01D15/10 F01K1/12 F01K11/02 F01K3/26 F03D9/00 F03G6/00 F24J2/00 (Advanced/Invention)
CPC: Y02E10/725 H02S10/20 F01K11/02 F03G6/001 F01K1/12 F01K3/262 F03D9/007 H02S10/10



Family:

Publication number	Publication date	Application number	Application date
EP3242012 A1	20171108	EP20140909533	20141231
US2017370250 AA	20171228	US20140540332	20141231
WO16106726 A1	20160707	WO2014CN096000	20141231

Priority:

WO2014CN096000 20141231

Probable Assignee: SHENZHEN ENESOON SCIENCE AND TECHNOLOGY CO LTD

Assignee(s): (std): SHENZHEN ENESOON SCIENCE AND TECH CO LTD ; SHENZHEN ENESOON SCIENCE AND TECHNOLOGY CO LTD

Assignee(s): SHENZHEN ENESOON SCIENCE AND TECHNOLOGY CO

Inventor(s): (std): CUI XIAOMIN ; HUANG BEI ; ZENG ZHIYONG

Agent(s): DOMPATENT VON KREISLER SELTING WERNER PARTNERSCHAFT VON PATENT U RECHTSANWAELTEN MBB; ADVANCE CHINA IP LAW OFFICE

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 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

Title: WIRELESS COMMUNICATION **DEVICE** AND WIRELESS COMMUNICATION **SYSTEM**

Abstract: Source: US2016278010A [EN] According to an embodiment, a wireless communication **device** includes a determiner, and an executor. The determiner is configured to determine whether the wireless communication **device** can continue operation by a stored electric power in which remaining capacity changes according to operation of the wireless communication **device** for a predetermined period, based on information including an operation timing associated with a cycle in which a management server. The executor is configured to execute an operation in which the data is transmitted and received between the other wireless communication **device** and the management server via the wireless communication **device** when the wireless communication **device** is able to continue the operation, and otherwise, cause the wireless communication **device** to move into intermittent operation and causes the other communication **device** to transmit the data to the management server not via the wireless communication **device**.

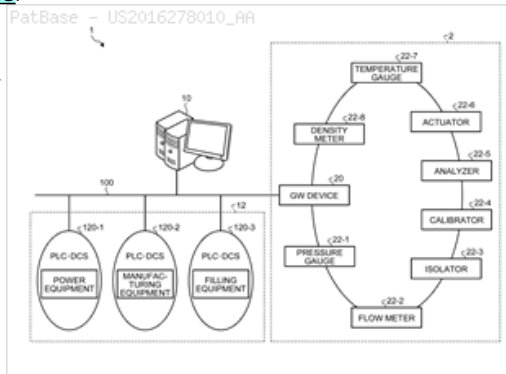
Classifications:

International (IPC 8-9): H04W28/12 H04W4/04 H04W40/10

H04W52/02 (Advanced/Invention)

CPC: H04W52/0219 H04W40/08 Y02D70/144 Y02D70/22 Y02D70/324 Y02D70/00

US: 370/311



Family:

Publication number	Publication date	Application number	Application date
JP2016178544 A2	20161006	JP20150058449	20150320
US2016278010 AA	20160922	US20160049460	20160222

Priority:

JP20150058449 20150320

Probable Assignee: TOSHIBA KK

Assignee(s): (std): TOSHIBA CORP ; TOSHIBA KK

Inventor(s): (std): DOI YUSUKE ; NISHIBAYASHI YASUYUKI ; SAKAMOTO TAKAFUMI ; SAKAMOTO TAKEFUMI

Agent(s): SAKAI INT PATENT OFFICE

Title: DIRECT GENERATION OF ELECTRICAL AND ELECTROMAGNETIC ENERGY FROM MATERIALS CONTAINING DEUTERIUM

Abstract: Source: US2007286324A [EN] A method and **apparatus** employ stimulating a material to cause reactions in the material, wherein the material comprises deuterium, and wherein the reactions generate vibrational motion of the material, coupling the vibrational motion to a transducer that generates energy from the vibrational motion of the material, and directing the energy to an electrical **device**.

Classifications:

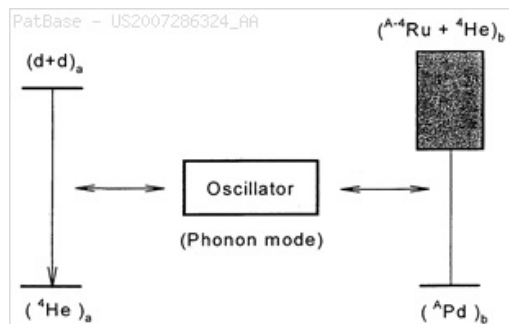
International (IPC 8-9): C25B1/02 G06F19/00 G21B1/00 G21B3/00 G21D7/00 (Advanced/Invention); C25B1/00 G06F19/00 G21B1/00 G21B3/00 (Core/Invention); G21B (Subclass/Invention)

International (IPC 1-7): G21B1/00

CPC: G21B3/00 Y02E30/18

European: G21B1/00F G21B3/00 Y02E30/14 Y02E30/18

US: 376/320 376/320P 376/321



Family:

Publication number	Publication date	Application number	Application date
AU2003301933 AA	20040603	AU20030301933	20030519
CA2486458 AA	20040527	CA20032486458	20030519
EP1576616 A2	20050921	EP20030808381	20030519
IL165281 A0	20051218	IL20040165281	20041118
JP2006515669 T2	20060601	JP20040551404T	20030519
US2007286324 AA	20071213	US20070783691	20070411
WO04044923 A2	20040527	WO2003US15713	20030519
WO06128182 A2	20061130	WO2006US20949	20060525
WO06128182 A3	20070419	WO2006US20949	20060525

Priority:

US20020381863P 20020518	US20030440426 20030517	US20030440426 20030519
US20070783691 20070411	US20050137541 20050526	US20030441891 20030517
US20030449247P 20030214	WO2003US15713 20030519	

Probable Assignee: SPINDLETOP CORP

Assignee(s): (std): HAGELSTEIN PETER ; HAGELSTEIN PETER L ; MCKUBRE MICHAEL C H ; TANZELLA FRANCIS L ; TREVITHICK MATTHEW D ; MULLICAN KEVIN ; PETER HAGELSTEIN ; SPINDLETOP CORP

Assignee(s): MICHAEL DH MCKUBRE ; MCKUBRE MICHAEL D H ; FRANCIS L TANZELLA ; MCKUBRE MICHAEL CH ; KEVIN MULLICAN ; MATTEW D TREVITHICK ; MCKUBRE MICHAEL C

Inventor(s): (std): HAGELSTEIN PETER ; MCKUBRE MICHAEL C H ; MULLICAN KEVIN ; TANZELLA FRANCIS L ; TREVITHICK MATTHEW D ; HAGELSTEIN PETER L

Inventor(s): FRANCIS L TANZELLA ; PETER HAGELSTEIN ; MCKUBRE MICHAEL CH ; MICHAEL C ; KEVIN MULLICAN ; MATTHEW D TREVITHICK ; MCKUBRE MICHAEL C

Agent(s): JONES DAY

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 KN 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

Title: PHOTOELECTRIC CONVERSION ELEMENT HAVING A SURFACE MEMBER OR A PROTECTION MEMBER AND BUILDING MATERIAL USING THE SAME

Abstract: Source: US6153823A [EN] A photoelectric conversion element comprising a substrate, a plurality of semiconductor junctions made of non-single-crystalline semiconductors formed on the substrate, and a surface material covering the semiconductor junctions is provided. The semiconductor junctions have respective absorption spectra different from each other and respective photo-deterioration rates different from each other. A photo-current generated by the semiconductor junction of the least deterioration rate is larger than that by the semiconductor junction of the greatest deterioration rate when no surface material is present, and when present, the surface material absorbs light in a range corresponding to a part of the absorption spectrum of the semiconductor junction of the least deterioration rate, so that the photo-current generated by the semiconductor junction of the least deterioration rate becomes smaller than that by the semiconductor junction of the greatest deterioration rate.

Classifications:

International (IPC 8-9): H01L31/0376 H01L31/04 H01L31/048 H01L31/06 H01L31/07 H01L31/075 H01L31/076 H01L31/11 H01L31/111 H01L31/20 H02J7/35 (Advanced/Invention); H01L31/04 (Advanced/Non-invention); H01L31/10 (Core/Invention)

International (IPC 1-7): E04D13/18 H01L25/00 H01L31/0216 H01L31/0376 H01L31/04 H01L31/042 H01L31/048 H01L31/06 H01L31/075 H02N6/00

CPC: Y10S136/293 Y02E10/548 H02J7/35 B32B17/04 B32B17/10788 H01L31/076 Y02B10/12 Y02B10/14 H01L31/048 Y02P90/50

European: B32B17/04 B32B17/10G36 H01L31/048 H01L31/075B H01L31/076 H01L31/20C H02J7/35 Y02B10/12 Y02B10/14 Y02E10/56D

US: 136/249 136/251 136/293

PatBase - US6153823_R

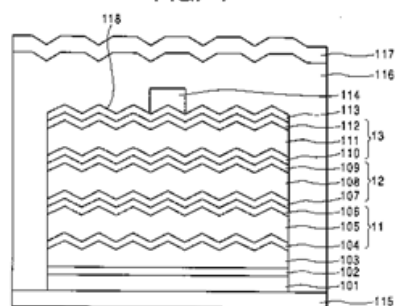
U.S. Patent

Nov. 28, 2000

Sheet 1 of 8

6,153,823

FIG. 1



Family:

Publication number	Publication date	Application number	Application date
AU199858317 A1	19980917	AU19980058317	19980310
AU747121 B2	20020509	AU19980058317	19980310
CN1155105 C	20040623	CN19981008044	19980310
CN1201265 A	19981209	CN19981008044	19980310
CN1311564 C	20070418	CN200310124701	19980310
CN1516289 A	20040728	CN200310124701	19980310
EP0865086 A2	19980916	EP19980104275	19980310
EP0865086 A3	20000524	EP19980104275	19980310
EP1850398 A2	20071031	EP20070112540	19980310
JP10256575 A2	19980925	JP19970056077	19970311
JP3935237 B2	20070620	JP19970056077	19970311
KR100367244 B1	20030219	KR19980008039	19980311
KR19980080115 A	19981125	KR19980008039	19980311
US6153823 A	20001128	US19980037825	19980311

Priority:

EP19980104275 19980310 JP19970056077 19970311

Probable Assignee: CANON INC

Assignee(s): (std): CANON KK

Assignee(s): CANON CORP ; CANON INC ; CANON K K ; CANON KABUSHIKI KAISHA

Inventor(s): (std): KANAI MASAHIRO ; OHTOSHI HIROKAZU ; OKADA NAOTO ; SAITO KEISHI ; SHIOZAKI ATSUSHI ; MASAHIRO SHIOZAKI ATSUSHI SAIT ; MASAHIRO KANAI ; MASAHAKA KANI ; KEISHI SAITO ; OTOSHI HIROKAZU ; ESHI SAITO ; ATSUSHI SHIOZAKI ; ATSUSHI HESAKI

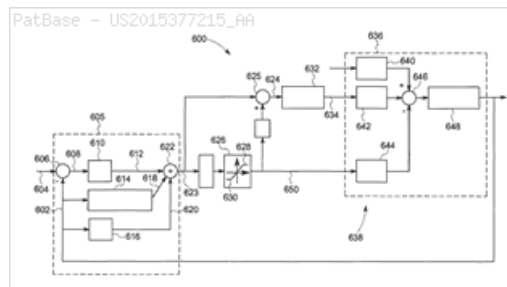
Inventor(s): NAOTO OKADA ; KANI MASAHAKA ; HIROKAZU OHTOSHI ; HESAKI ATSUSHI ; SHIOZAKI ATSUSHI SAITO KEISHI KANAI MASAHIRO ; SAITO ESHI

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

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

Abstract: Source: US2015377215A [EN] A method and a **system** for managing loads on a wind turbine are provided. The method includes receiving a signal relative to a yaw misalignment of the wind turbine, generating a yaw error signal based on the yaw misalignment, and comparing the yaw error signal to a first predetermined yaw error threshold value. The method also includes regulating a **speed** of the rotor to a value determined by a predetermined tip **speed** ratio, reducing the yaw misalignment using a yaw control **system**, and restarting the wind turbine if the yaw error signal is reduced to less than a second predetermined yaw error threshold value within a predetermined period of time. The method further includes shutting down the wind turbine if the yaw error signal remains greater than the second predetermined yaw error threshold value beyond the predetermined period of time.

US: 416/1 416/35 700/287



Publication number	Publication date	Application number	Application date
US2015377215 AA	20151231	US20140319904	20140630
US9745958 BB	20170829	US20140319904	20140630

US20140319904 20140630

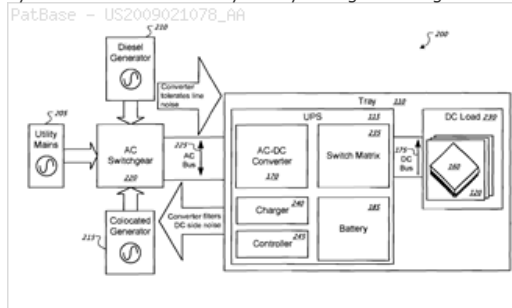
Agent(s): NITIN N

Title: DIRECT-COUPLED IT LOAD

Abstract: Source: US2009021078A [EN] **Apparatus** and associated method and computer program products involve a highly efficient uninterruptible power distribution architecture to support modular processing units. As an illustrative example, a modular processing unit includes an integrated uninterruptible power **system** in which a PFC-boost AC-to-DC conversion occurs between the utility AC grid and the processing circuit (e.g., microprocessor) loads. In an illustrative data center facility, a power distribution architecture includes a modular array of rack-mountable processing units, each of which has processing circuitry to handle network-related processing tasks. Associated with each modular processing unit is an integrated uninterruptible power supply (UPS) to supply operating power to the network processing circuitry. Each UPS includes a battery selectively connectable across a DC bus, and a AC-to-DC rectifier that converts an AC input voltage to a single output voltage on the DC bus. The regulated DC bus voltage may be close to the battery's fully charged voltage.

Classifications:

International (IPC 8-9): G06F1/26 H02B1/01 H02J1/14 H02J9/00 H02J9/04 H02J9/06 H02M1/42 H02M3/335 (Advanced/Invention); H02J1/14 H02J9/06 H02M1/42 H02M3/335 (Advanced/Non-invention); G06F1/26 H02B1/00 H02J1/14 H02J9/00 H02J9/06 H02M1/00 H02M3/24 (Core/Invention); H02M1/00 (Core/Non-invention); G06F H02J H02M (Subclass/Invention)
CPC: Y10T307/615 Y10T307/625 Y10T307/631 H02J9/062 G06F1/263 G06F1/30 Y02B10/72 H02J1/14 H02M3/335
European: G06F1/26B G06F1/30 H02J1/14 H02J9/06C H02M3/335 Y02B10/72
US: 307/64 307/66 307/66P 307/67 307/67P 361/627 361/627S

**Family:**

Publication number	Publication date	Application number	Application date
CN101803148 A	20100811	CN200880106672	20080718
CN101803148 B	20140611	CN200880106672	20080718
DE202008018644 U1	20170511	DE200820018644U	20080718
EP2174398 A2	20100414	EP20080782060	20080718
HK1147360 A1	20150612	HK20110101334	201110211
KR101496999 B1	20150227	KR20107003619	20080718
KR20100051069 A	20100514	KR20107003619	20080718
US2009021078 AA	20090122	US20070779606	20070718
US2012056481 AA	20120308	US20110291460	201111108
US8080900 BB	20111220	US20070779606	20070718
WO09012451 A2	20090122	WO2008US70475	20080718
WO09012451 A3	20090813	WO2008US70475	20080718

Priority:

EP20080782060 20080718 US20070779606 20070718 WO2008US70475 20080718
US20110291460 20111108

Probable Assignee: GOOGLE LLC

Assignee(s): (std): AIGNER GERALD ; BEATY DONALD L ; CARLSON ANDREW ; CARLSON ANDREW B ; CLIDARAS JIMMY ; CORHODZIC SELVER ; HAMBURGEN WILLIAM ; KRIEGER KEN ; WHITTED WILLIAM H ; EXAFLOP LLC ; SYKORA MONTGOMERY ; GOOGLE INC

Assignee(s): GOOGLE LLC

Inventor(s): (std): BEATY DONALD L ; CARLSON ANDREW B ; CLIDARAS JIMMY ; CORHODZIC SELVER ; HAMBURGEN WILLIAM ; KRIEGER KEN ; SYKORA MONTGOMERY ; WHITTED WILLIAM H ; WILLIAM HAMBURGEN ; SELVER CORHODZIC ; MONTGOMERY SYKORA ; KEN KRIEGER ; JIMMY CLIDARAS ; GERALD AIGNER ; CARLSON ANDREW ; AIGNER GERALD

Inventor(s): ANDREW B CARLSON ; WILLIAM H WHITTED ; DONALD L BEATY

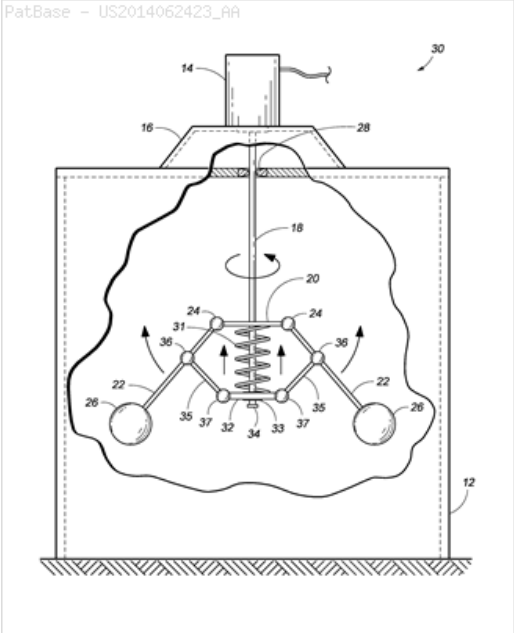
Agent(s): SCHLEY JAN MALTE; FISH AND RICHARSON PC; FISH AND RICHARDSON PC; MIEDEMA GARRETT R ET AL

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 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: ROTATING KINETIC AND POTENTIAL ENERGY FREQUENCY REGULATION **DEVICE** FOR FAST RESPONSE LARGE SCALE ELECTRIC POWER APPLICATIONS

Abstract: Source: US2014062423A [EN] A rotating **device** for multi-megawatt, fast response frequency regulation for the electric grid. The **device** generally has a main shaft coupled to a **motor**-generator, a main spring concentric to the main shaft, and several radially-symmetric arms, each connected to the main spring via a four-bar mechanism. As the rotational **speed** of the **device** increases, centrifugal force acting on the arms causes them to rise, the four-bar mechanism compresses the main spring, and energy is stored in the **device** as a combination of kinetic rotational energy, elastic potential energy, and gravitational potential energy. The **device** can be configured with additional springs, which can be compression springs, tension springs, or a combination thereof, in order to increase the amount of energy produced. Symmetrically-spaced gliding masses can be arranged on the arms as well.

Classifications:
International (IPC 8-9): H02K7/02 (Advanced/Invention)
CPC: Y02E60/16 H02K7/025
US: 322/29 322/4



Family:

Publication number	Publication date	Application number	Application date
US2014062423 AA	20140306	US20120602103	20120901
US8803487 BB	20140812	US20120602103	20120901

Priority:
US20120602103 20120901

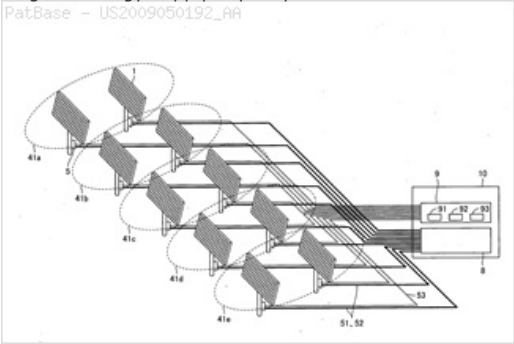
Probable Assignee: DEHLSN ASSOCIATES LLC
Assignee(s): (std): DEHLSN ASSOCIATES LLC ; DEHLSN JAMES G P ; DELHSEN JAMES G P ; QUINTANA MAURICIO
Inventor(s): (std): DEHLSN JAMES G P ; DELHSEN JAMES G P ; QUINTANA MAURICIO
Agent(s): MARY J

Title: TRACKING-TYPE PHOTOVOLTAIC POWER GENERATION SYSTEM, METHOD FOR CONTROLLING THE SYSTEM, AND PROGRAM PRODUCT FOR CONTROLLING THE SYSTEM

Abstract: Source: US2009050192A [EN] There is provided a system control method which reduces maximum energy consumption in a tracking-type photovoltaic power generation system having a plurality of tracking-type photovoltaic power generation devices and reduces energy supply capacity. An integrated control part drives driving parts in each of tracking-type photovoltaic power generation devices at predetermined time intervals and drives the driving parts at different times, which can disperse temporally the large energy consumed at the time of activation of the driving parts in the tracking-type photovoltaic power generation devices, thereby reducing the energy supply capacity.

Classifications:

International (IPC 8-9): H01L31/042 (Advanced/Invention);
H01L31/042 (Core/Invention)
CPC: H02S20/00 F24J2/40 F24J2/38 F24J2/542 Y02E10/47 Y02E10/50
H02S20/32
European: F24J2/38 F24J2/40 H01L31/042B R24J2/54C2 Y02E10/47
Y02E10/50
US: 136/246



Family:

Publication number	Publication date	Application number	Application date
JP2007103713 A2	20070419	JP20050292357	20051005
US2009050192 AA	20090226	US20060992999	20060926
WO07040086 A1	20070412	WO2006JP319008	20060926

Priority:

JP20050292357 20051005 WO2006JP319008 20060926

Probable Assignee: SHARP KK

Assignee(s): (std): ANZAWA OSAMU ; NAKANO TAKANORI ; SHARP KK ; TANAKA MASAO ; UEDA KOSUKE

Assignee(s): SHARP CORP ; SHARP KABUSHIKI KAISHA

Inventor(s): (std): ANZAWA OSAMU ; NAKANO TAKANORI ; TANAKA MASAO ; UEDA KOSUKE ; YASUZAWA OSAMU

Agent(s): NAKAMURA GIHEI; NODA HISATO; SAKAI MASAYUKI; HORII YUTAKA; MORITA TOSHIO; FUKAMI HISAO; NIXON AND VANDERHYE PC

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 HN HR HU ID IE IL IN IS IT KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR 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

Title: ATMOSPHERIC WATER GENERATOR **SYSTEM**

Abstract: Source: US2014138236A [EN] An atmospheric water generator and **system** for condensing and collecting moisture contained in the air serves to cool and dehumidify the air. One aspect of the design includes generation of electricity via a turbine configured to be actuated by an increase in gas pressure from heat transfer fluid in a continuous heat transfer fluid **system** as it exits the evaporator. In alternative embodiments, the **system** can be used in a multi-zone application or to provide cooled air and water to a building. An embodiment primarily for use as an air conditioning unit is also described. Alternatively, fly-back technology is used to configure **solar** or wind powered DC current for use by a water generation **system**. In certain environments oil free compressors are employed in the water generation unit.

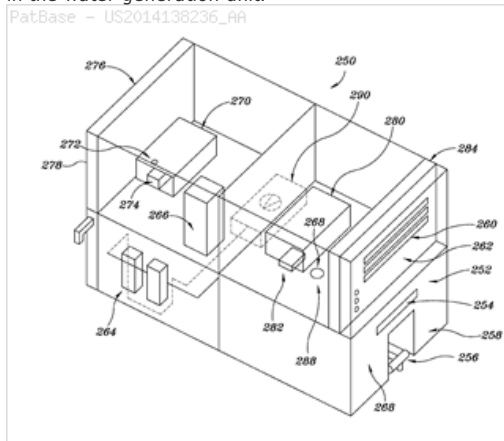
Classifications:

International (IPC 8-9): B01D5/00 B01D53/26 C02F1/04 C02F1/78 F24F3/14 (Advanced/Invention)

CPC: B01D5/0006 B01D5/006 C02F1/001 C02F1/008 C02F1/14 C02F1/78 C02F2209/005 C02F2303/10 C02F2303/18 C02F2201/009 C02F1/04 F24F3/14 Y02W10/30 Y02A20/212

US: 202/185.1 202/185.3

PatBase - US2014138236_AA

**Family:**

Publication number	Publication date	Application number	Application date
US2014138236 AA	20140522	US20120234614	20120524
WO12162545 A2	20121129	WO2012US39436	20120524
WO12162545 A3	20130221	WO2012US39436	20120524

Priority:

US20110489588P 20110524

US20120234614 20120524

WO2012US39436 20120524

Probable Assignee: AMBIENT WATER INC**Assignee(s):** (std): AWG INT INC ; AWG INTERNATIONAL INC ; WHITE KEITH**Assignee(s):** AMBIENT WATER INC**Inventor(s):** (std): WHITE KEITH**Agent(s):** TARLETON E RUSSELL 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 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

Title: STAND-ALONE **ELECTRIC POWER GENERATION** UNIT

Abstract: Source: US2012205980A [EN] A method and **apparatus** for sustained power self-generation using a reduced drag high efficiency (HE) electric machine are disclosed. Electric power supply having a power level is produced from an electrical generation unit including an HE electric machine and a non-fossil fuel unit such as a hydrogen unit, a hydro unit, a battery, a power grid and so on. Portions of the electric power supply are diverted to the electrical generation unit, another electrical generation unit including an HE electric machine and a non-fossil fuel unit, and a power distribution grid. The HE machines includes a conversion efficiency factor rating of greater than 1 hp of input power to 746 watts of output power.

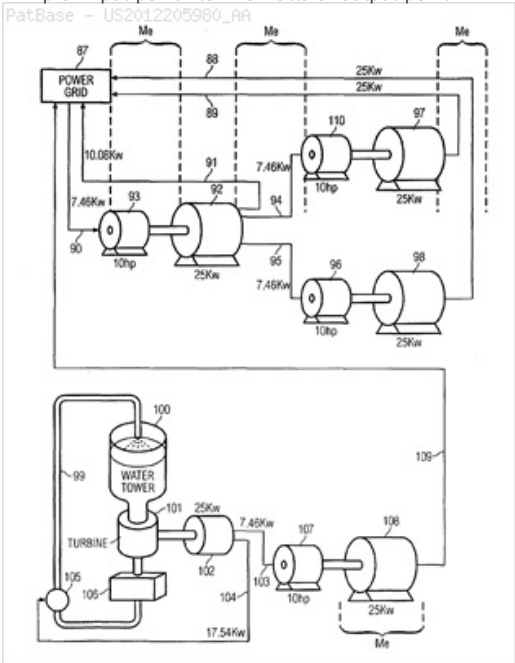
Classifications:

International (IPC 8-9): H02J3/38 H02K53/00 (Advanced/Invention)

CPC: Y10T307/544 H02K53/00

European: H02K53/00

US: 307/51 307/51P



Family:

Publication number	Publication date	Application number	Application date
TW201141019 A	20111116	TW20100135891	20101021
US2012205980 AA	20120816	US20100503552	20101019
WO11067636 A1	20110609	WO2010IB02656	20101019

Priority:

US20090279525P 20091022 US20100503552 20101019 WO2010IB02656 20101019

Probable Assignee: REDEMPTIVE TECHNOLOGIES LTD

Assignee(s): (std): HOLCOMB ROBERT RAY ; REDEMPTIVE TECHNOLOGIES LTD

Assignee(s): REDEMPTIVE TECHNOLOGIES LIMITED

Inventor(s): (std): HOLCOMB ROBERT RAY

Agent(s): HOLCOMB ROBERT RAY

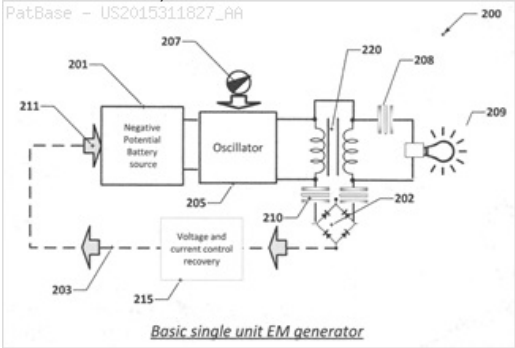
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ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

Title: NEGENTROPIC METHOD AND **APPARATUS** TO GENERATE USABLE WORK WHILE RECONDITIONING THE **ENERGY SOURCE** USING ELECTROMAGNETIC ENERGY WAVES

Abstract: Source: US2015311827A [EN] The patent describes the entropic methods and **apparatus** of electromagnetic high frequency wave generator **systems** which convert electrical energy into magnetic energy waves and back which generates usable work as electrical potential. The patent primarily delves into the method and **apparatus** needed to extract Cold potential electromagnetic energy waves by using electromagnetic wave converters units which allow the extraction of work as net zero energy change process while simultaneously re-conditioning the **energy source(s)** electrical potential using a reversible net zero entropy change circuit without violating the Second law of Thermodynamics.

Classifications:

International (IPC 8-9): H02J5/00 H02J7/02
H02N11/00 (Advanced/Invention)
CPC: Y10S74/09 H02J50/12 H02J5/005 H02J7/025
US: 307/104 320/108 74/DIG.9



Family:

Publication number	Publication date	Application number	Application date
US2015311827 AA	20151029	US20140120129	20140428

Priority:

US20140120129 20140428

Probable Assignee:

VILLOBOS VICTOR M

Assignee(s): (std):

VILLOBOS VICTOR M

Inventor(s): (std):

VILLOBOS VICTOR M

Title: METHOD AND **APPARATUS** FOR GENERATING POLLUTION FREE ELECTRICAL ENERGY FROM HYDROCARBONS

Abstract: Source: US2004011523A [EN] The present invention relates to the generation of substantially pollution free energy by utilizing hydrocarbons to create electrical energy, while reinjecting exhaust fumes or other byproducts into a subterranean formation. Thus, remote, low reserve oil and gas **fields** may be exploited and produced without requiring the construction of expensive gas transmission lines.

Classifications:

International (ipc 8-9): E21B41/00 E21B43/16 E21B43/18

E21B43/40 (Advanced/Invention);

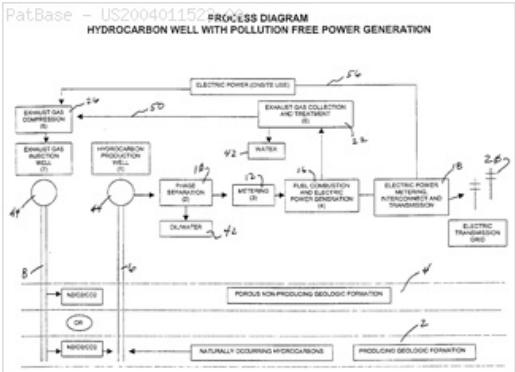
E21B41/00 E21B43/16 E21B43/34 (Core/Invention)

International (ipc 1-7): E21B43/00 E21B43/16 E21B43/18 H02M

CPC: E21B41/0057 E21B43/40

European: E21B41/00M2 E21B43/40

US: 166/244.1 166/244.100P 166/266 166/266S 166/267 166/401 166/65.1



Family:

Publication number	Publication date	Application number	Application date
AU2003254014 AA	20040209	AU20030254014	20030717
AU2003254014 AH	20040209	AU20030254014	20030717
CA2492082 AA	20050113	CA20032492082	20030717
CA2492082 C	20080311	CA20032492082	20030717
US2004011523 AA	20040122	US20020199430	20020718
US2006054318 AA	20060316	US20040985344	20041109
US2008017369 AA	20080124	US20070759118	20070606
US6820689 BB	20041123	US20020199430	20020718
WO04010568 A2	20040129	WO2003US22536	20030717
WO04010568 A3	20040715	WO2003US22536	20030717

Priority:

US20020199430 20020718 US20040985344 20041109 US20070759118 20070606
WO2003US22536 20030717

Probable Assignee: SARADA STEVEN A

Assignee(s): (std): PRODUCTION RESOURCES INC ; SARADA STEVEN ; SARADA STEVEN A

Assignee(s): SCHNEIDER RANDOLPH H

Inventor(s): (std): SARADA STEVEN A

Inventor(s): STEVEN A SARADA ; SARADA STEVEN

Agent(s): GOODWIN MCKAY; PARLEE MCLAWS LLP; SHERIDAN ROSS PC

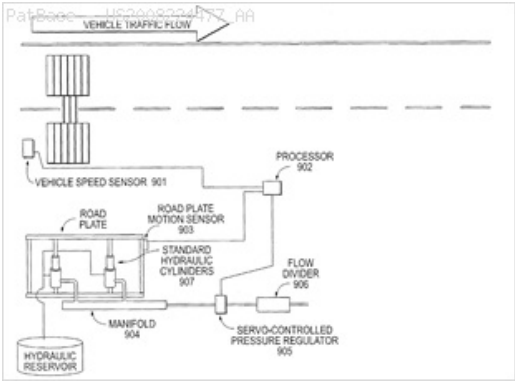
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE 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

Title: **SYSTEM** AND METHOD FOR ELECTRICAL POWER GENERATION UTILIZING VEHICLE TRAFFIC ON ROADWAYS

Abstract: Source: US2008224477A [EN] An improved **system** and method for electrical power generation utilizing vehicle traffic on roadways is disclosed. According to one embodiment, a power generation **system** comprises one or more standard hydraulic cylinders, one or more electro-mechanical generators, and one or more hydraulic accumulators coupled to a hydraulic **motor**.

Classifications:

International (IPC 8-9): E01C11/00 E01C9/00 F03G7/00 H02P9/04 (Advanced/Invention);
E01C11/00 E01C9/00 F03G7/00 H02P9/04 (Core/Invention)
CPC: F05D2240/40 F05D2260/406 F03G7/08 F01D17/26
European: F01D17/26 F03G7/08 R05B240/40 R05B260/406
US: 290/1R 404/17 404/71 404/72



Family:

Publication number	Publication date	Application number	Application date
US2008224477 AA	20080918	US20070687503	20070316
US2009179433 AA	20090716	US20090414043	20090330
US7530761 BB	20090512	US20070687503	20070316

Priority:

US20070687503 20070316 US20090414043 20090330

Probable Assignee: ALTERNATIVE ENERGY SOURCES TEC

Assignee(s): (std): ALTERNATIVE ENERGY SOURCES TEC ; KENNEY TERRY DOUGLAS

Assignee(s): ALTERNATIVE ENERGY SOURCES TECHNOLOGIES INC

Inventor(s): (std): KENNEY TERRY DOUGLAS

Agent(s): ORRICK HERRINGTON AND SUTCLIFFE LLP IP PROSECUTION DEPARTMENT; ORRICK HERRINGTON AND SUTCLIFFE LLP

Title: METHOD AND **SYSTEM** FOR INTEGRATED HOME COOLING UTILIZING **SOLAR** POWER

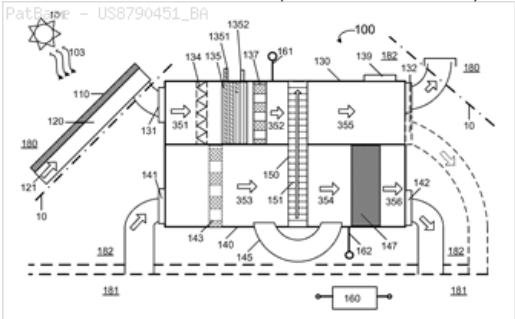
Abstract: Source: US8790451B [EN] A **system** for utilizing **solar** energy for home utility supply includes an air collector coupled to a **solar** module disposed to collect ambient air carrying thermal energy generated from the **solar** module. The **system** includes an energy transfer module (ETM) comprising a first heat-exchanger configured to process a first air stream from the air collector and output a second air stream carrying a portion of the thermal energy. Additionally, the **system** includes an air-conditioning module for processing a third air stream from interior space. The **system** includes an air processor comprising a desiccant material to pre-condition the third air stream utilizing the second air stream in the ETM and form a fourth air stream for the air-conditioning module and a fifth air stream in the ETM. Furthermore, the **system** uses a second heat-exchanger to process the fourth air stream and form a six air stream with reduced temperature and humidity.

Classifications:

International (IPC 8-9): B01D53/06 F24F3/147 (Advanced/Invention)

CPC: F24F3/1423 F24F2005/0064 F24F2203/1032 Y02B10/20 Y02B10/24 F24F5/0046 B01D53/06 B01D53/261 B01D53/263 B01D2251/302 B01D2251/406 B01D2253/106 B01D2253/11 B01D53/28 Y02A30/272

US: 62/271 96/111 96/112 96/118 96/125 96/127



Family:

Publication number	Publication date	Application number	Application date
US8790451 BA	20140729	US20110235338	20110916

Priority:

US20100384142P 20100917 US20110235338 20110916

Probable Assignee: FTC SOLAR INC

Assignee(s): (std): NARAYANAMURTHY RAMACHANDRAN ; PVT SOLAR INC

Assignee(s): TRIPLEPOINT CAPITAL LLC ; SUNEDISON INC ; WELLS FARGO BANK NATIONAL ASSOCIATION ADMINISTRATIVE AGENT AS ; NVT LLC ; SOLAICX ; SUN EDISON LLC ; WILMINGTON TRUST NATIONAL ASSOCIATION SOLELY IN ITS CAPACITY COLLATERAL TRUSTEE AS ; DEUTSCHE BANK NEW YORK BRANCH ADMINISTRATIVE AGENT AG AS ; FTC SOLAR INC ; GOLDMAN SACHS BANK USA ADMINISTRATIVE AGENT AS

Inventor(s): (std): NARAYANAMURTHY RAMACHANDRAN

Agent(s): ARMSTRONG TEASDALE LLP

Title: REGENERATIVE ENERGY STORAGE AND CONVERSION **SYSTEM**

Abstract: Source: US2002060500A [EN] A hydraulic circuit **system** and method for storing and converting hydraulic or mechanical energy to electricity wherein the hydraulic circuit **system** comprises: a power source for generating energy to produce electricity, a hydraulic power unit operably associated with the power source, one or more hydropneumatic accumulators operably associated with the hydraulic power unit, a hydraulic **motor** operably associated with the accumulators, a flywheel assembly operably associated with the hydraulic **motor**, a hydrostatic drive unit operably associated with the flywheel assembly, and a generator assembly operably associated with the hydrostatic drive unit wherein the generator assembly is further associated with the hydraulic power unit.

Classifications:

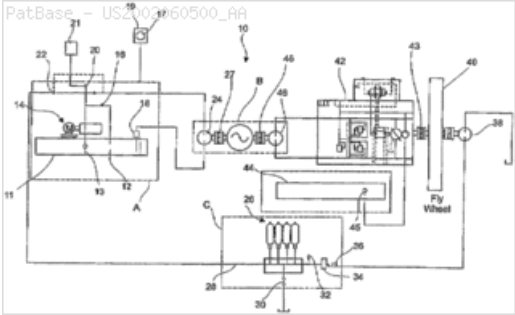
International (IPC 8-9): F03D9/02 (Advanced/Invention);
F03G3/08 (Advanced/Non-invention);
F03D9/00 (Core/Invention);
F03G3/00 (Core/Non-invention)

International (IPC 1-7): F16D31/02 G21D7/02

CPC: F03G3/08 F05B2210/16 Y02E10/725 F03D9/12 Y02E60/16
Y02P90/50

European: F03D9/02 R03G3/08 R05B210/16 R05B260/421
Y02E10/72H Y02E60/15 Y02E60/16

US: 290/44 310/11 310/11P 60/398



Family:

Publication number	Publication date	Application number	Application date
US2002060500 AA	20020523	US20010006454	20011119
US6748737 BB	20040615	US20010006454	20011119

Priority:

US20000249851P 20001117

US20010006454 20011119

Probable Assignee:

LAFFERTY PATRICK ALAN

Assignee(s):

LAFFERTY PATRICK ALAN

Inventor(s): (std):

LAFFERTY PATRICK ALAN

Title: **SYSTEM** FOR PRODUCING HYDROGEN AND ELECTRICITY FROM **PHOTOVOLTAIC** ENERGY

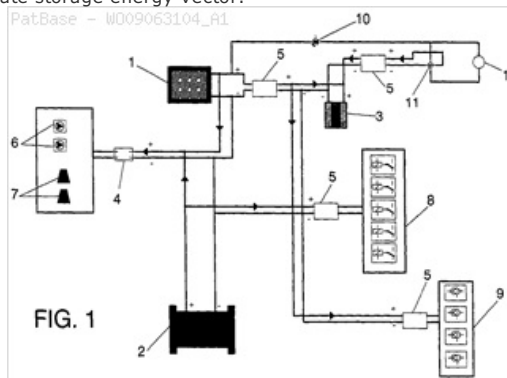
Abstract: The **system** has at least one **photovoltaic** cell module (1) which powers an electrolyser (3) which generates hydrogen and has means for storing the hydrogen produced; at least one fuel cell (2) being included for generating electricity from the hydrogen stored; providing improvements in terms of efficiency of production of electricity from **photovoltaic** energy and the availability thereof, as hydrogen is used as intermediate storage energy vector.

Classifications:

International (IPC 8-9): H01L31/042 (Advanced/Invention);
H01M16/00 H01M8/06 H02J3/32 H02J3/38 (Advanced/Non-invention);
H01L31/042 (Core/Invention);
H01M16/00 H01M8/06 H02J3/28 H02J3/38 (Core/Non-invention)

CPC: Y02E10/563 Y02E10/566 H01L31/042 H01M8/06 H02J3/32
H02J3/38 H01M16/00 H01M8/0656 H02J7/35 H02J3/383

European: H01M16/00 H01M8/06B6 T02J3/38D1 T02J7/35
Y02E60/50



Family:

Publication number	Publication date	Application number	Application date
ES2325848 AA	20090921	ES20070002993	20071113
ES2325848 BA	20100625	ES20070002993	20071113
WO09063104 A1	20090522	WO2008ES00680	20081104

Priority:

ES20070002993 20071113

Probable Assignee: SOLAR INICIATIVAS TECNOLOGICAS

Assignee(s): (std): BENEITO PEREZ RUBEN ; MOLINA TORTOSA JOSE ANTONIO ; MOLTO PAYA MANUEL ; NAVARRO BERBEGAL RAFAEL ; PEREZ HERRANZ VALENTIN ; SOLAR INICIATIVAS TECNOLOGICAS ; VILAPLANA CERDA JOAQUIN

Assignee(s): SOLAR INICIATIVAS TECNOLOGICAS SL ; SOLAR INICIATIVAS TECNOLOGICAS S L

Inventor(s): (std): BENEITO PEREZ RUBEN ; MOLINA TORTOSA JOSE ANTONIO ; MOLTO PAYA MANUEL ; NAVARRO BERBEGAL RAFAEL ; PEREZ HERRANZ VALENTIN ; VILAPLANA CERDA JOAQUIN

Inventor(s): VALENTIN PEREZ HERRANZ ; RUBEN BENEITO PEREZ ; RAFAEL NAVARRO BERBEGAL ; MANUEL MOLTO PAYA ; JOSE ANTONIO MOLINA TORTOSA ; JOAQUIN VILAPLANA CERDA

Agent(s): UNGRIA LOPEZ JAVIER

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 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