

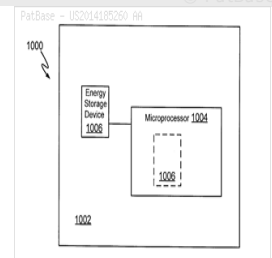
1) Family number: 56830228 (US2014185260 AA)

NANOSTRUCTURED ELECTROLYTIC ENERGY STORAGE DEVICES

Abstract: Source: US2014185260 AA In one embodiment, a structure for an energy storage device may include a first nanostructured substrate having a conductive layer and a dielectric layer formed on the conductive layer. A second nanostructured substrate includes another conductive layer. A separator separates the first and second nanostructured substrates and allows ions of an electrolyte to pass through the separator. The structure may be a nanostructured electrolytic capacitor with the first nanostructured substrate forming a positive electrode and the second nanostructured substrate forming a negative electrode of the capacitor.

Probable Assignee: INTEL CORP

Earliest Publication Date: 20140703



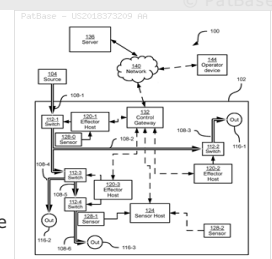
2) Family number: 66164273 (US2018373209 AA)

CONTROL SYSTEM, METHOD AND APPARATUS FOR UTILITY DELIVERY SUBSYSTEMS

Abstract: Source: US2018373209 AA A control subsystem, for a utility delivery subsystem having an effector for enabling or disabling delivery of a utility from a source to an output device via a conduit, includes an effector host configured to receive the effector at a port. The effector host operates the effector in response to an instruction received via a wireless communications interface. The subsystem includes a control gateway having a two communications interfaces, a first to establish a connection with the effector host, and a second to connect to a network. The control gateway includes a memory storing schedule data received via the second interface, and a processor configured to send the instruction to the effector host via the first interface, based on the schedule data. The subsystem includes a server having a memory storing the schedule data and a server communications interface for transmitting the schedule data to the control gateway.

Probable Assignee: NOID TECH LLC

Earliest Publication Date: 20170622



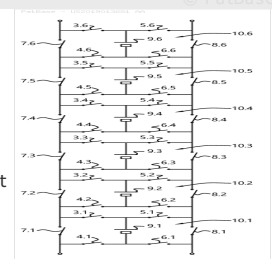
3) Family number: 66281487 (US2019013681 AA)

DEVICE AND METHOD FOR THE RECONFIGURATION OF A RECHARGEABLE ENERGY STORAGE DEVICE INTO SEPARATE BATTERY CONNECTION STRINGS

Abstract: Source: US2019013681 AA Reconfiguration of a rechargeable energy storage system into two or more new capacitor or battery or fuel cell packs arranged in "connections", e.g. series or parallel strings. Each pack of rechargeable energy storage devices includes rechargeable energy storage modules. In each rechargeable energy storage module, which can include one or more capacitors or fuel cells or battery cells, there is arranged a network of banks of switches. A first bank of switches is arranged to connect a rechargeable energy storage module in a first series connection string with other rechargeable energy storage modules. A second bank of switches is arranged to connect a rechargeable energy storage module in a second connection string with other rechargeable energy storage modules. A first bypass switch is arranged to exclude a rechargeable energy storage module from the first series connection string when the first bypass switch is activated.

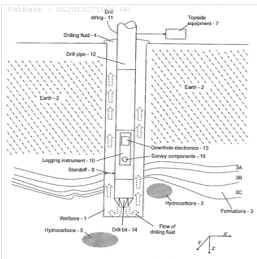
Probable Assignee: VITO NV

Earliest Publication Date: 20170706



Probable Assignee: FASTCAP SYSTEMS CORP

Earliest Publication Date: 20130510



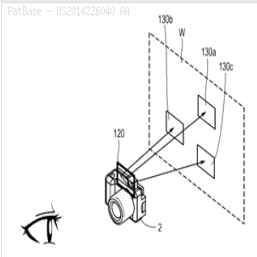
6) Family number: 57180404 (US2014226040 AA)

IMAGING DEVICE, IMAGING METHOD, AND LIGHT-EMITTING DEVICE

Abstract: Source: US2014226040 AA An imaging device includes an imaging section and a light-emitting section, and an imaging direction of the imaging section and a direction in which a light is projected by light emission of the light-emitting section are different directions.

Probable Assignee: SONY CORP

Earliest Publication Date: 20140813



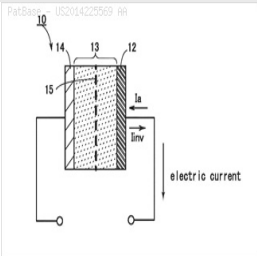
7) Family number: 57181077 (US2014225569 AA)

DRIVING METHOD OF ELECTROCHEMICAL DEVICE

Abstract: Source: US2014225569 AA When a hole in a separator is clogged, the cycle characteristics of a battery might be lowered and the internal resistance of a battery might be increased to reduce the output. Thus, a means for suppression of or recovery from degradation due to a clogged separator in a battery such as a lithium-ion secondary battery is provided. When reverse pulse current is supplied multiple times during charge, a separator is prevented from being clogged and a voltage increase (increase in internal resistance) during charge is suppressed, so that charge can be normally performed repeatedly.

Probable Assignee: SEMICONDUCTOR ENERGY LAB CO LTD

Earliest Publication Date: 20140814



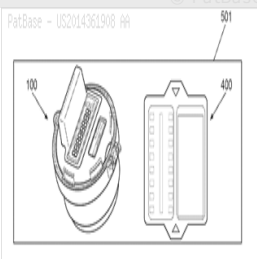
8) Family number: 57982550 (US2014361908 AA)

WIRELESS UTILITY METERING DEVICES, SYSTEMS, AND METHODS

Abstract: Source: US2014361908 AA A multifunction electronic device generally involving a processor, a power source in electronic communication with the processor; and wireless communicator, the wireless communicator in electronic communication with the processor and the power source. The processor controls the wireless communicator in a manner that minimizes power consumption by the multifunction electronic device, whereby the power source is conserved. The multifunction electronic device serves at least one function, such as a register device or a remote device. The multifunction electronic device wirelessly communicates with a remote server, such as a cloud-based server, and performs metering measurements by way of a magnetic field sensor for enhancing accuracy of such measurements.

Probable Assignee: TRANSPARENT TECHNOLOGIES INC

Earliest Publication Date: 20141211



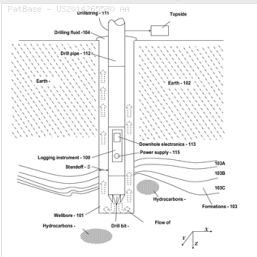
9) Family number: 57413547 (US2014265580 AA)

INERTIAL ENERGY GENERATOR FOR SUPPLYING POWER TO A DOWNHOLE TOOL

Abstract: Source: US2014265580 AA A downhole power supply is provided that includes an energy storage adapted to operate at high temperatures, and a rotary inertial energy generator to capture the shock energy and vibrational energy of downhole movement of the drill string. The energy storage may include at least one ultracapacitor.

Probable Assignee: FASTCAP SYSTEMS CORP

Earliest Publication Date: 20140918



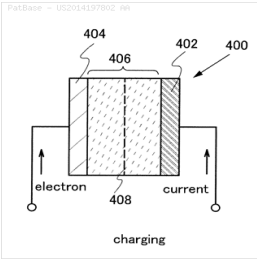
10) Family number: 56894796 (US2014197802 AA)

ELECTRONIC DEVICE

Abstract: Source: US2014197802 AA Degradation of a battery is prevented or the degree of the degradation is reduced, and charge and discharge performance of the battery is maximized and maintained for a long time. A reaction product, which is formed on an electrode surface and causes various malfunctions and degradation of a battery such as a lithium-ion secondary battery, is dissolved by application of electrical stimulus, specifically, by applying a signal to supply a current reverse to a current with which the reaction product is formed (reverse pulse current).

Probable Assignee: SEMICONDUCTOR ENERGY LAB CO LTD

Earliest Publication Date: 20140717



11) Family number: 56729448 (US2014173300 AA)

POWER STORAGE SYSTEM AND POWER STORAGE DEVICE

Abstract: Source: US2014173300 AA The versatility of a power feeding device is improved. A power storage system includes a power storage device and a power feeding device. The power storage device includes data for identifying the power storage device. The power storage device includes a power storage unit, a switch that controls whether power from the power feeding device is supplied to the power storage unit, and a control circuit having a function of controlling a conduction state of the switch in accordance with a control signal input from the power feeding device. The power feeding device includes a signal generation circuit having a function of identifying the power storage device by the data input from the power storage device, generating the control signal corresponding to the identified power storage device, and outputting the generated control signal to the power storage device.

Probable Assignee: SEMICONDUCTOR ENERGY LAB CO LTD

Earliest Publication Date: 20140619

