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No Warranty

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*includes affiliated entities

Patent No.	Title
Owned by Hewlett Packard Enterprise	
GB2376325	System And Method Utilizing On-chip Voltage Controlled Frequency Modulation To Manage Power Consumption
US7013462	METHOD TO MAP AN INVENTORY MANAGEMENT SYSTEM TO A CONFIGURATION MANAGEMENT SYSTEM
US7313503	DESIGNING LAYOUT FOR INTERNET DATACENTER COOLING
US7577862	Self Adjusting Clocks In Computer Systems That Adjust In Response To Changes In Their Environment
US7043650	System And Method For Intelligent Control Of Power Consumption Of Distributed Services During Periods When Power Consumption Must Be Reduced
US6907534	MINIMIZING POWER CONSUMPTION IN PIPELINED CIRCUIT BY SHUTTING DOWN PIPELINED CIRCUIT IN RESPONSE TO PREDETERMINED PERIOD OF TIME HAVING EXPIRED
US6854065	Loadshedding Uninterruptible Power Supply
DE10231160	Loadshedding Uninterruptible Power Supply
US6924979	Mounting Apparatus For Coupling Control Circuitry To An Air Moving Device
US7240500	Dynamic Fluid Sprayjet Delivery System
US7378165	System And Method For Providing Electrical Power To An Equipment Rack Using A Fuel Cell
US6913069	Cooling Device Having Fins Arranged To Funnel Air
US7043647	Intelligent Power Management For A Rack Of Servers
US6927976	Air Baffle For Managing Cooling Air Re-Circulation In An Electronic System
US8430156	Liquid Loop With Multiple Pump Assembly
GB2413709	Liquid Loop With Multiple Pump Assembly
US8020608	Heat Sink Fin With Stator Blade
US7327569	Processor Module With Thermal Dissipation Device
US7558063	SERVER WITH A FLEXIBLE COOLING SCHEME
US7764184	Apparatus And System For Monitoring Environmental Factors In A Computer System
GB2421603	Apparatus And System For Monitoring Environmental Factors In A Computer System
US6981915	Airflow Volume Control System
CN200580015616	Airflow Volume Control System
US6948555	HEAT DISSIPATING SYSTEM AND METHOD
US7647787	Upgradeable, Modular Data Center Cooling Apparatus
US7810341	Redundant Upgradeable, Modular Data Center Cooling Apparatus
US7599761	Cooling Assist Module
US8655501	Cooling Assist Module
US7620480	Cooling Components Across A Continuum
CN200680050186	Cooling Components Across A Continuum
US8001407	Server Configured For Managing Power And Performance
DE102007048505	Server Configured For Managing Power And Performance
US7551440	SYSTEM AND METHOD FOR COOLING AN ELECTRONIC COMPONENT

Patent No.	Title
US7511959	Scalable Computing Apparatus
US8249841	Computerized Tool For Assessing Conditions In A Room
US7660115	FAN DOCKING COLLAR
US7817430	Airflow Adjustment In An Electronic Module Enclosure
US7800902	Air Backflow Prevention In An Enclosure
US7813120	Airflow Path Within An Electronic Module Enclosure
US7755889	Air Manifold For Electronic Module Enclosure
US8144458	Component Layout In An Enclosure
CN200880129470	Management System Operable Under Multiple Metric Levels
US8731733	Management System Operable Under Multiple Metric Levels
US8565933	Heatsink With A Plurality Of Fans
US8843354	Capacity Planning
CN200880129888	Capacity Planning
US7633181	DC-BASED DATA CENTER POWER ARCHITECTURE
GB2446454	Cool Design Data Center
US8984906	Cool Design Data Center
US8174829	Cooling Electronic Devices Provided In Rows Of Racks
CN200980158448	Determiningpower Topology Of Plurality Of Computer Systems
US8732508	DETERMINING POWER TOPOLOGY OF A PLURALITY OF COMPUTER SYSTEMS
DE602009041056	Determining Power Topology Of Plurality Of Computer Systems
GB2415129	Determining Power Topology Of Plurality Of Computer Systems
US8671295	GENERATING A SIGNAL TO REDUCE COMPUTER SYSTEM POWER CONSUMPTION FROM SIGNALS PROVIDED BY A PLURALITY OF POWER SUPPLIES
US8625280	COOLING MEMORY MODULES USING COLD PLATE BLADES COUPLED TO THE MEMORY MODULES VIA CLIPS
US8767403	FRAME HAVING FRAME BLADES THAT PARTICIPATE IN COOLING MEMORY MODULES
US8447569	Determining Sustainability Of A Data Center
US9081880	Determining Sustainability Of A Data Center
US8310100	System And Method For A Redundant Power Solution
CN201080033493	Managing Electric Energy Distribution To Multiple Loads Using Selective Capping
US9229514	Managing Electric Energy Distribution To Multiple Loads Using Selective Capping
US9055698	Fluid Flow Control for Computing Device
US9918410	FAN CONTROL SYSTEM AND METHOD
CN201080069596	RESOURCE MANAGEMENT FOR DATA CENTERS
GB2497892	RESOURCE MANAGEMENT FOR DATA CENTERS
US9658662	RESOURCE MANAGEMENT FOR DATA CENTERS
US8205102	Intelligent Power Management of an Intermediate Network Device Switching Circuitry and PoE Delivery
CN201010002121	Intelligent Power Management of an Intermediate Network Device Switching Circuitry and PoE Delivery
US9326430	Device for Cooling an Electronic Component in a Data Center

Patent No.	Title
US9506815	TEMPERATURE BAND OPERATION LOGGING
US9322681	DETERMINE INSTALLATION OF COMPONENTS BASED ON PERFORMANCE CHARACTERISTICS
US10193358	DEEP-CHARGING POWER RESOURCES OF POWER RESOURCE GROUP HAVING IDENTIFIER CORRESPONDING TO RANGE WITHIN WHICH MODULO FALLS
US9429335	ADIABATIC COOLING UNIT
US9651275	ADIABATIC COOLING UNIT
US9851768	VOLTAGE REGULATOR CONTROL SYSTEM
US8964384	Component Cooling
TWI562516	CONVERTERS TO PROVIDE LIGHT LOAD OUTPUT
US10476377	CONVERTERS TO PROVIDE LIGHT LOAD OUTPUT
US10057179	POLICY-BASED SCALING OF NETWORK RESOURCES
US10798016	POLICY-BASED SCALING OF NETWORK RESOURCES
US9853450	POWER FACTOR CORRECTOR POWER SHARING
US9101081	Data Center Canopy Including Turning Vanes
US9545034	DATA CENTER CANOPY INCLUDING TURNING VANES
US10244666	CONTROLLING IMPEDANCE OF BLANK CARTRIDGES
TWI553458	BEHAVIOR MODIFICATION OF A POWER SUPPLY IN RESPONSE TO A DETECTED CONDITION
US10447074	BEHAVIOR MODIFICATION OF A POWER SUPPLY IN RESPONSE TO A DETECTED CONDITION
US10548242	AIR AND FLUID COOLING OF A DATA CENTER
US10684664	REMOVABLE TEST AND DIAGNOSTICS CIRCUIT
TWI608786	MODULAR COOLING
US10455726	MODULAR COOLING
US10620857	COMBINED BACKUP POWER
US10331182	HEAT EXCHANGERS
US10761954	SENSOR DETECTION ARCHITECTURE
US10615436	FUEL CELL TO POWER ELECTRONIC COMPONENTS
US10177596	BACKUP POWER MANAGER
US10447047	CHARGING ENERGY STORAGE MODULES
US10193360	UNINTERRUPTIBLE POWER SUPPLY RECEPTIVE TO DIFFERENT TYPES OF OUTPUT MODULES
US10520259	MEMORY MODULE COOLER WITH ROTATABLE COOLING TUBE
US10444147	OPTICAL BIOFILM PROBE
US10240997	SENSOR MEMBERS
US10337950	COOLANT LEAK DETECTION BASED ON A NANOSENSOR RESISTANCE MEASUREMENT
US10747291	OVERCURRENT EVENT POWER THROTTLING
US10143111	ADJUSTMENT OF A PUMP SPEED BASED ON A VALVE POSITION
US10827649	COOLING FLUIDS IN OPPOSITE DIRECTIONS ACROSS A DEVICE
US10561040	FLEXIBLE GASKET SEAL FOR DIRECT LIQUID COOLING OF ELECTRONIC DEVICES
US9426932	SERVER WITH HEAT PIPE COOLING

Patent No.	Title
US10048729	SERVER WITH HEAT PIPE COOLING
US10765032	Floating Liquid Cooled Heat Transfer Solution
US7962769	BALANCING OF RENEWABLE POWER USAGE AND WORKLOAD PERFORMANCE BETWEEN COOLING SYSTEM AND ELECTRONIC COMPONENTS
US8321183	Multi-variable Control-based Optimization To Achieve Target Goal
US8452626	Technology Replacement Fost Estimation Using Environmental Cost Considerations
US8812166	SUPPLYING A RESOURCE TO AN ENTITY FROM A RESOURCE ACTUATOR
US8392574	PROVIDING SERVICES BASED ON AN ENVIRONMENTAL METRIC
US9342375	MANAGING WORKLOAD AT A DATA CENTER
US9053439	PREDICTING NEAR-FUTURE PHOTOVOLTAIC GENERATION
US9607343	GENERATING A DEMAND RESPONSE FOR AN ENERGY-CONSUMING FACILITY
Owned by Facebook, Inc.	
US8344546	POWER SUPPLY UNIT DIRECTLY CONNECTED TO BACKUP DIRECT CURRENT POWER SOURCE
US8723362	DIRECT TIE-IN OF A BACKUP POWER SOURCE TO MOTHERBOARDS IN A SERVER SYSTEM
US8820113	COOLING COMPUTING DEVICES IN A DATA CENTER WITH AMBIENT AIR COOLED USING HEAT FROM THE COMPUTING DEVICES
US8937405	DATA CENTER USING FUEL CELLS IN PLACE OF DIESEL GENERATORS FOR BACKUP POWER
US9723759	COOLING SERVERS IN A DATA CENTER USING FANS EXTERNAL TO SERVERS
US8467906	LOAD BALANCING TASKS IN A DATA CENTER BASED ON PRESSURE DIFFERENTIAL NEEDED FOR COOLING SERVERS
US8736109	POWERING A DATA CENTER USING MULTIPLE CONNECTIONS FROM A UTILITY GRID
US10805413	MANAGING NOTIFICATIONS PUSHED TO USER DEVICES
US10021203	MANAGING NOTIFICATIONS PUSHED TO USER DEVICES
US8825842	MANAGING NOTIFICATIONS PUSHED TO USER DEVICES
US9628577	MANAGING NOTIFICATIONS PUSHED TO USER DEVICES
US9948737	MANAGING NOTIFICATIONS PUSHED TO USER DEVICES
US9237201	MANAGING NOTIFICATIONS PUSHED TO USER DEVICES
US9529417	PERFORMING SELECTED OPERATIONS USING LOW POWER-CONSUMING PROCESSORS ON USER DEVICES
JP6081645	CONTROLLING NOTIFICATION BASED ON POWER CONSUMPTION AND SOCIAL FACTORS
CNZL201280066011 9	BASED ON POWER CONSUMPTION AND SOCIAL FACTOR CONTROL OF THE NOTIFICATION
US9270633	CONTROLLING NOTIFICATION BASED ON POWER EXPENSE AND SOCIAL FACTORS
JP5833247	CONTROLLING NOTIFICATION BASED ON POWER EXPENSE AND SOCIAL FACTORS
KR101470963	CONTROLLING NOTIFICATION BASED ON POWER EXPENSE AND SOCIAL FACTORS

Patent No.	Title
US8751592	CONTROLLING NOTIFICATION BASED ON POWER EXPENSE AND SOCIAL FACTORS
US9819605	CONTROLLING NOTIFICATION BASED ON POWER EXPENSE AND SOCIAL FACTORS
JP5952481	CONTROLLING NOTIFICATION BASED ON POWER CONSUMPTION AND SOCIAL FACTORS
US9385987	CONTROLLING NOTIFICATION BASED ON POWER EXPENSE AND SOCIAL FACTORS
US9584992	LOW POWER HIGH FREQUENCY SOCIAL UPDATES FOR MOBILE DEVICES
US10070284	LOW POWER HIGH FREQUENCY SOCIAL UPDATES FOR MOBILE DEVICES
US10136267	DEVICE ACTIONS BASED ON DEVICE POWER
US9801032	SERVER-SIDE RATE-LIMITING ALGORITHMS FOR PIGGYBACKING SOCIAL UPDATES FOR MOBILE DEVICES
US10771932	DEVICE ACTIONS BASED ON DEVICE POWER
US8989818	DEVICE ACTIONS BASED ON DEVICE POWER
US10194285	SERVER-SIDE RATE-LIMITING ALGORITHMS FOR PIGGYBACKING SOCIAL UPDATES FOR MOBILE DEVICES
US8954100	SERVER-SIDE RATE-LIMITING ALGORITHMS FOR PIGGYBACKING SOCIAL UPDATES FOR MOBILE DEVICES
US9232372	SERVER-SIDE RATE-LIMITING ALGORITHMS FOR PIGGYBACKING SOCIAL UPDATES FOR MOBILE DEVICES
US9148068	BACKUP POWER SYSTEM FOR RACK-MOUNTED EQUIPMENT
JP5782201	DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
US10425369	DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
US9246862	DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
US9521623	DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
KR101552193	-DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
GB2774318	SERVER-SIDE RATE-LIMITING ALGORITHMS FOR PIGGYBACKING SOCIAL UPDATES FOR MOBILE DEVICES
US10986058	DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
US9894024	DYNAMIC DUTY-CYCLING OF PROCESSOR OF MOBILE DEVICE BASED ON OPERATING CONDITION OF MOBILE DEVICE
US10028224	SUBSTANTIALLY CONTINUOUS LOCATION LOGGING FOR GEOGRAPHIC-POSITIONING CAPABLE DEVICES
US9491603	SUBSTANTIALLY CONTINUOUS LOCATION LOGGING FOR GEOGRAPHIC-POSITIONING CAPABLE DEVICES

Patent No.	Title
US7992023	METHOD AND SYSTEM FOR MANAGING PERIPHERAL CONNECTION WAKEUP IN A PROCESSING SYSTEM SUPPORTING MULTIPLE VIRTUAL MACHINES
US7346792	METHOD AND SYSTEM FOR MANAGING PERIPHERAL CONNECTION WAKEUP IN A PROCESSING SYSTEM SUPPORTING MULTIPLE VIRTUAL MACHINES
US7401242	DYNAMIC POWER MANAGEMENT IN A PROCESSOR DESIGN
US7681056	DYNAMIC POWER MANAGEMENT IN A PROCESSOR DESIGN
US7376532	MAXIMAL TEMPERATURE LOGGING
US7756668	MAXIMAL TEMPERATURE LOGGING
US7376914	METHOD AND COMPUTER PROGRAM PRODUCT FOR DESIGNING POWER DISTRIBUTION SYSTEM IN A CIRCUIT
US7352252	CIRCUIT AND METHOD TO MEASURE THRESHOLD VOLTAGE DISTRIBUTIONS IN SRAM DEVICES
US7355906	SRAM CELL DESIGN TO IMPROVE STABILITY
US7269131	METHOD AND APPARATUS FOR MANAGING A LOOP NETWORK
US7400574	METHOD AND APPARATUS FOR MANAGING A LOOP NETWORK
US7768906	METHOD AND APPARATUS FOR MANAGING A LOOP NETWORK
US7355435	ON-CHIP DETECTION OF POWER SUPPLY VULNERABILITIES
US7952370	ON-CHIP DETECTION OF POWER SUPPLY VULNERABILITIES
US7646208	ON-CHIP DETECTION OF POWER SUPPLY VULNERABILITIES
US7945795	ENABLING A CLIENT DEVICE IN A CLIENT DEVICE/DATA CENTER ENVIRONMENT TO RESUME FROM A SLEEP MORE QUICKLY
US7386745	ENABLING A CLIENT DEVICE IN A CLIENT DEVICE/DATA CENTER ENVIRONMENT TO RESUME FROM A SLEEP STATE MORE QUICKLY
US9154608	DATA EXCHANGE BETWEEN ANTENNA AND MODEM OF MOBILE DEVICE
US7392366	ADAPTIVE FETCH GATING IN MULTITHREADED PROCESSORS, FETCH CONTROL AND METHOD OF CONTROLLING FETCHES
US8130755	LOAD BALANCING WITH DIRECT TERMINAL RESPONSE
US7430609	MANAGING ACCESS TO STREAMS HOSTED ON DUPLICATING SWITCHES
US7292571	LOAD BALANCING WITH DIRECT TERMINAL RESPONSE
US7746787	WIRELESS DATAGRAM TRANSACTION PROTOCOL SYSTEM
US8059654	WIRELESS DATAGRAM TRANSACTION PROTOCOL SYSTEM
US9066293	WIRELESS COMMUNICATION SYSTEM BASED ON POWER RESOURCES
US8665878	WIRELESS DATAGRAM TRANSACTION PROTOCOL SYSTEM
US6965564	WIRELESS DATAGRAM TRANSACTION PROTOCOL SYSTEM
US9396500	METHODS AND SYSTEMS FOR ADAPTIVE CAPACITY MANAGEMENT
US9246554	USING A WIRELESS RADIO TO MANAGE POWER CONSUMPTION

Patent No.	Title
US8929806	PASSIVELY POWERING A WIRELESS COMMUNICATIONS DEVICE
US9060449	ARRANGEMENT OF COMPUTING ASSETS IN A DATA CENTER
US8842432	ARRANGEMENT OF COMPUTING ASSETS IN A DATA CENTER
US8885335	SERVER COOLING BY AIRFLOW THROTTLING
US9141155	COOLING COMPUTING ASSETS IN A DATA CENTER USING A HOT STACK
US9144181	COOLING COMPUTING ASSETS IN A DATA CENTER USING HOT AND COLD STACKS
US9344151	POWER LINE COMMUNICATION MONITOR
US10361749	POWER LINE COMMUNICATION MONITOR
US9173327	COOLING SERVERS IN A DATA CENTER USING PREVAILING WINDS
US10097641	PORTABLE PLATFORM FOR NETWORKED COMPUTING
CNZL201480028550	FOR NETWORK COMPUTER PORTABLE PLATFORM
US9674751	PORTABLE PLATFORM FOR NETWORKED COMPUTING
JP5902364	PORTABLE PLATFORM FOR NETWORKED COMPUTING
US9137723	PORTABLE PLATFORM FOR NETWORKED COMPUTING
KR101794159	PORTABLE PLATFORM FOR NETWORKED COMPUTING
US9998969	PORTABLE PLATFORM FOR NETWORKED COMPUTING
KR101611341	PORTABLE PLATFORM FOR NETWORKED COMPUTING
JP6209670	PORTABLE PLATFORM FOR NETWORKED COMPUTING
US10630796	CONSERVING BATTERY AND DATA USAGE
US10649607	RE-RANKING STORY CONTENT
US10249007	SOCIAL COVER FEED INTERFACE
US9781223	CONSERVING BATTERY AND DATA USAGE
US9552031	POWER SHELF FOR COMPUTER SERVERS
US10238000	POWER SHELF FOR COMPUTER SERVERS
US9930132	CONTENT SPECIFIC ROUTER CACHING
US9408329	SERVER DEVICE COOLING SYSTEM
US10587715	RESIDENTIAL CACHE APPLIANCE UTILIZING A SOCIAL NETWORK
US10291735	RESIDENTIAL CACHE APPLIANCE UTILIZING A SOCIAL NETWORK
US10397357	RURAL AREA NETWORK DEVICE
US9667498	SELF-ADAPTIVE CONTROL SYSTEM FOR DYNAMIC CAPACITY MANAGEMENT OF LATENCY-SENSITIVE APPLICATION SERVERS
US10212220	SELF-ADAPTIVE CONTROL SYSTEM FOR DYNAMIC CAPACITY MANAGEMENT OF LATENCY-SENSITIVE APPLICATION SERVERS
US10379558	DYNAMICALLY RESPONDING TO DEMAND FOR SERVER COMPUTING RESOURCES
US9426657	BLUETOOTH TRANSMISSION SECURITY PATTERN

Patent No.	Title
US9801062	BLUETOOTH TRANSMISSION SECURITY PATTERN
US20170353817	TECHNIQUES FOR PREDICTIVE POWER MANAGEMENT OF A MOBILE DEVICE
US9781542	TECHNIQUES FOR PREDICTIVE POWER MANAGEMENT OF A MOBILE DEVICE
US10205797	APPLICATION SERVICE DELIVERY THROUGH AN APPLICATION SERVICE AVATAR
US10601947	APPLICATION SERVICE DELIVERY THROUGH AN APPLICATION SERVICE AVATAR
US9710343	POWER FAIL CIRCUIT FOR MULTI-STORAGE-DEVICE ARRAYS
US10229019	POWER FAIL CIRCUIT FOR MULTI-STORAGE-DEVICE ARRAYS
US9490996	HOME AUTOMATION DEVICE
US10164789	HOME AUTOMATION DEVICE
US10386421	ENERGY BASED BATTERY BACKUP UNIT TESTING
US10063092	DATA CENTER POWER NETWORK WITH MULTIPLE REDUNDANCIES
US9622373	HIGH VOLTAGE DIRECT CURRENT POWER SYSTEM FOR DATA CENTERS
US9986658	POWER CONNECTION CLIP FOR A SHELF IN A SERVER RACK
US10277523	DYNAMICALLY ADAPTING TO DEMAND FOR SERVER COMPUTING RESOURCES
US10331198	DYNAMICALLY ADAPTING TO DEMAND FOR SERVER COMPUTING RESOURCES
US10165709	MODULAR NETWORK SWITCHES, ASSOCIATED STRUCTURES, AND ASSOCIATED METHODS OF MANUFACTURE AND USE
US9949409	MODULAR NETWORK SWITCHES, ASSOCIATED STRUCTURES, AND ASSOCIATED METHODS OF MANUFACTURE AND USE
US10271461	MODULAR NETWORK SWITCHES, ASSOCIATED STRUCTURES, AND ASSOCIATED METHODS OF MANUFACTURE AND USE
US10356955	MODULAR NETWORK SWITCHES, ASSOCIATED STRUCTURES, AND ASSOCIATED METHODS OF MANUFACTURE AND USE
US10028417	MODULAR NETWORK SWITCHES, ASSOCIATED STRUCTURES, AND ASSOCIATED METHODS OF MANUFACTURE AND USE
US9854697	MODULAR NETWORK SWITCHES, ASSOCIATED STRUCTURES, AND ASSOCIATED METHODS OF MANUFACTURE AND USE
US10624229	HIGH VOLTAGE DIRECT CURRENT POWER GENERATOR FOR COMPUTER SERVER DATA CENTERS
US10123450	HIGH VOLTAGE DIRECT CURRENT POWER GENERATOR FOR COMPUTER SERVER DATA CENTERS
US10277474	COMPUTER NETWORK PLANNING
US10236726	JOINT SELECTION OF ANTENNAS AND TRANSMISSION POWER LEVEL FOR WIRELESS ENERGY TRANSFER
US10219415	SERVER FACILITY COOLING SYSTEM
US10459741	AUTOMATIC LOAD BALANCING FOR RESOURCE ALLOCATIONS

Patent No.	Title
US10542596	LOW POWER PULSE WIDTH MODULATION BY CONTROLLING BITS ORDER
US10528115	OBTAINING SMOOTHER POWER PROFILE AND IMPROVED PEAK-TIME THROUGHPUT IN DATACENTERS
US10425331	PRE-ROUTING DEVICE FOR DATA CENTERS
US10188013	APPARATUS, SYSTEM, AND METHOD FOR DEPLOYING DATA CENTER MODULES
US10368467	SYSTEM AND METHOD FOR DATA CENTER HEAT CONTAINMENT
US10757838	SYSTEM AND METHOD FOR DATA CENTER HEAT CONTAINMENT
US10206313	SYSTEMS AND METHODS FOR CONFIGURING INFORMATION TECHNOLOGY RACKS
US10719120	EFFICIENT UTILIZATION OF SPARE DATACENTER CAPACITY
US10765036	SYSTEMS AND DEVICES FOR LOW-VIBRATION COOLING OF STORAGE DRIVES
US10743234	PROXIMITY-BASED MESSAGING PROTOCOL
US20190182980	SERVER RACK PLACEMENT IN A DATA CENTER
US10778533	SYSTEMS AND METHODS FOR SIMULATING DATA CENTER NETWORK TOPOLOGIES
US10845854	THERMAL MASS AWARE THERMAL MANAGEMENT
US10817035	ELECTRICAL SYSTEM STABILITY
US7228242	ADAPTIVE POWER CONTROL BASED ON PRE PACKAGE CHARACTERIZATION OF INTEGRATED CIRCUITS
US8442784	ADAPTIVE POWER CONTROL BASED ON PRE PACKAGE CHARACTERIZATION OF INTEGRATED CIRCUITS
US7953990	ADAPTIVE POWER CONTROL BASED ON POST PACKAGE CHARACTERIZATION OF INTEGRATED CIRCUITS
US7774625	ADAPTIVE VOLTAGE CONTROL BY ACCESSING INFORMATION STORED WITHIN AND SPECIFIC TO A MICROPROCESSOR
US7598731	SYSTEMS AND METHODS FOR ADJUSTING THRESHOLD VOLTAGE
US7859062	SYSTEMS AND METHODS FOR INTEGRATED CIRCUITS COMPRISING MULTIPLE BODY BIASING DOMAINS
US8253434	CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US8222914	SYSTEMS AND METHODS FOR ADJUSTING THRESHOLD VOLTAGE
US7941675	ADAPTIVE POWER CONTROL
US8593169	FREQUENCY SPECIFIC CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US6885210	SYSTEM AND METHOD FOR MEASURING TRANSISTOR LEAKAGE CURRENT WITH A RING OSCILLATOR WITH BACKBIAS CONTROLS
US7786756	METHOD AND SYSTEM FOR LATCHUP SUPPRESSION
CNZL200380109600	ADAPTIVE POWER CONTROL

Patent No.	Title
US7256639	SYSTEMS AND METHODS FOR INTEGRATED CIRCUITS COMPRISING MULTIPLE BODY BIAS DOMAINS
US7868638	SYSTEM AND METHOD FOR MEASURING NEGATIVE BIAS THERMAL INSTABILITY WITH A RING OSCILLATOR
US7949864	BALANCED ADAPTIVE BODY BIAS CONTROL
US8697512	SYSTEMS AND METHODS FOR INTEGRATED CIRCUITS COMPRISING MULTIPLE BODY BIASING DOMAINS
US8022747	SYSTEM FOR SUBSTRATE POTENTIAL REGULATION DURING POWER-UP IN INTEGRATED CIRCUITS
US10432174	CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US7336092	CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US9407241	CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US6882172	SYSTEM AND METHOD FOR MEASURING TRANSISTOR LEAKAGE CURRENT WITH A RING OSCILLATOR
US7212022	SYSTEM AND METHOD FOR MEASURING TIME DEPENDENT DIELECTRIC BREAKDOWN WITH A RING OSCILLATOR
US7667478	SYSTEM AND METHOD FOR MEASURING NEGATIVE BIAS THERMAL INSTABILITY WITH A RING OSCILLATOR
US8319515	SYSTEMS AND METHODS FOR ADJUSTING THRESHOLD VOLTAGE
US7782110	SYSTEMS AND METHODS FOR INTEGRATED CIRCUITS COMPRISING MULTIPLE BODY BIAS DOMAINS
US7126365	SYSTEM AND METHOD FOR MEASURING NEGATIVE BIAS THERMAL INSTABILITY WITH A RING OSCILLATOR
US7336090	FREQUENCY SPECIFIC CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US7671621	CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US7112978	FREQUENCY SPECIFIC CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
CNZL200580019615	SYSTEM AND METHOD FOR MEASURING TIME DEPENDENT DIELECTRIC BREAKDOWN
US7642835	SYSTEM FOR SUBSTRATE POTENTIAL REGULATION DURING POWER-UP IN INTEGRATED CIRCUITS
US8085084	SYSTEM FOR SUBSTRATE POTENTIAL REGULATION DURING POWER-UP IN INTEGRATED CIRCUITS
US7456628	SYSTEM AND METHOD FOR MEASURING NEGATIVE BIAS THERMAL INSTABILITY WITH A RING OSCILLATOR
US8040149	FREQUENCY SPECIFIC CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US7235998	SYSTEM AND METHOD FOR MEASURING TIME DEPENDENT DIELECTRIC BREAKDOWN WITH A RING OSCILLATOR

Patent No.	Title
US9548725	FREQUENCY SPECIFIC CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US7180322	CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US9100003	SYSTEMS AND METHODS FOR ADJUSTING THRESHOLD VOLTAGE
US7626409	FREQUENCY SPECIFIC CLOSED LOOP FEEDBACK CONTROL OF INTEGRATED CIRCUITS
US7038483	SYSTEM AND METHOD FOR MEASURING TRANSISTOR LEAKAGE CURRENT WITH A RING OSCILLATOR
US7205758	SYSTEMS AND METHODS FOR ADJUSTING THRESHOLD VOLTAGE
US8420472	SYSTEMS AND METHODS FOR INTEGRATED CIRCUITS COMPRISING MULTIPLE BODY BIASING DOMAINS
US6903564	DEVICE AGING DETERMINATION CIRCUIT
US7816742	SYSTEMS AND METHODS FOR INTEGRATED CIRCUITS COMPRISING MULTIPLE BODY BIASING DOMAINS
US10854532	COMPRESSED AIR AND LATTICE STRUCTURE COOLING
US7157963	METHODS AND APPARATUS FOR CONTROLLING THE OUTPUT VOLTAGE OF A SWITCHED-MODE POWER SUPPLY
US7161425	RADIO FREQUENCY POWER AMPLIFIER FOR LOSSLESS POWER COMBINING
US7224993	POWER CONTROL METHOD WITH DTX FRAME DETECTION FOR A COMMUNICATION CHANNEL
US7929580	INEXPENSIVE TERAHERTZ PULSE WAVE GENERATOR
CN101517396	INEXPENSIVE TERAHERTZ PULSE WAVE GENERATOR
US7227905	OPEN-LOOP DIVERSITY TECHNIQUE FOR SYSTEMS EMPLOYING MULTI-TRANSMITTER ANTENNAS
US7929653	OPEN-LOOP DIVERSITY TECHNIQUE FOR SYSTEMS EMPLOYING MULTI-TRANSMITTER ANTENNAS
US10750373	DETERMINING WHETHER A SITE SUPPORTS A SUPERCELL BASE STATION
US10524134	SITE SURVEY TOOL FOR CELLULAR BASE STATION PLACEMENT
US10905030	LIQUID-COOLING WITHIN AN AIR-COOLED FACILITY
US9310867	INTELLIGENT POWER CONTROLLER
US8601288	INTELLIGENT POWER CONTROLLER
US8868941	APPARATUS AND METHODS FOR AN INTERCONNECT POWER MANAGER
US10152112	POWER MANAGER WITH A POWER SWITCH ARBITRATOR
Owned by Microsoft Corporation	
CN101401056	Scaling idle detection metric for power management on computing device
CN102132523	Device power management using network connections
CN102279643	Super capacitor supplemented server power

Patent No.	Title
CN102893273	Resource-based adaptive server loads
CN103608747	Electric power based on contextual information and load management
CN105103080	Server rack fuel cell
CN105765290	Gas for data center's power generation supplies shock absorber
CN106030452	The backup power source management of computing system
CN106465561	Immersion data center
CN106662901	Controlled concurrent utilization of multiple power sources
CN106687873	Server utility as grid conditions sensor
CN107810662	Subsea vessel cooling system via integrated heat exchanger
EP2721461	Power and load management based on contextual information
EP2726954	Power capping based on generator capacity
EP3069069	Gas supply shock absorber for datacenter power generation
EP3162175	Submerged datacenter
EP3227915	System for effectively transferring heat from electronic devices and method for forming the same
EP2726954	Power capping based on generator capacity
EP3069069	Gas supply shock absorber for datacenter power generation
EP3162175	Submerged datacenter
EP3227915	System for effectively transferring heat from electronic devices and method for forming the same
JP6581603	The submerged data center
RU2696256	Submersible data processing centre
EP2721461	Power and load management based on contextual information
EP2726954	Power capping based on generator capacity
EP3069069	Gas supply shock absorber for datacenter power generation
EP3162175	Submerged datacenter
EP3227915	System for effectively transferring heat from electronic devices and method for forming the same
US10033210	Power supply for use with a slow-response power source
US10048732	Datacenter power management system
US10098259	Heat dissipation in electronics
US10103574	Controlled concurrent utilization of multiple power supplies
US10111363	System for effectively transferring heat from electronic devices and method for forming the same
US10126771	Localized weather prediction through utilization of cameras
US10126804	Balancing input phases across server rack power supplies
US10168756	Backup power management for computing systems
US10175731	Shared cooling for thermally connected components in electronic devices
US10188017	Server cooling fluid inlet and pickup placement in submerged cooling enclosures
US10200303	Datacenter byproduct management interface system

Patent No.	Title
US10204659	Hard disk drive backplane for immersion-cooled circuit board
US10216256	Power conservation of computing components using forced idle state
US10264710	Thermal material within a device
US10285309	Submerged datacenter
US10289189	Usage pattern based supervisory control of power management
US10296073	Server rack fuel cell
US10361965	Datacenter operations optimization system
US10419320	Infrastructure resource management system
US10426062	High pressure, energy efficient data center
US10429908	Black body radiation in a computing device
US10485137	Cooling device for fluid submersion of electronics
US10524395	Artificial reef datacenter
US10528113	Low latency computer system power reduction
US10539993	Integrated energy storage systems in computing facilities
US10564688	Datacenter power management system
US10609836	Dc bus architecture for datacenters
US10613600	Advanced power based thermal control systems
US10628762	Learning power grid characteristics to anticipate load
US10705591	Aggregated electronic device power management
US10750637	Immersion cooling infrastructure module having compute device form factor
US10765033	Immersion cooling enclosures with insulating liners
US10897831	Data center stranded power recovery design
US10904160	Datacenter operations optimization system
US10925188	Self-contained immersion cooling server assemblies
US10928845	Scheduling a computational task for performance by a server computing device in a data center
US7055046	Power management architecture for defining component power states under a global power state and applying a new component power state when a new component power state is greater than a registered power state floor
US7203854	System for reconfiguring a computer between a high power and high functionality configuration and a low power and low functionality configuration
US7228448	Method for making power supplies smaller and more efficient for high-power pcs
US7490256	Identifying a target processor idle state
US7574613	Scaling idle detection metric for power management on computing device
US7577860	Processor specific bios interface for power management
US7730333	Intermittent computing
US7793126	Using priorities and power usage to allocate power budget
US7831850	Hybrid operating systems for battery powered computing systems

Patent No.	Title
US8001403	Data center power management utilizing a power policy and a load factor
US8032767	Power-efficient state setting of data-center elements
US8046600	Collaborative power sharing between computing devices
US8074087	Configuring processors and loads for power management
US8171115	Resource equalization for inter- and intra- data center operations
US8185767	Automatic management of a power state of a device with network connections
US8190939	Reducing power consumption of computing devices by forecasting computing performance needs
US8270154	Self-contained and modular air-cooled containerized server cooling
US8321703	Power aware memory allocation
US8433931	Integrating energy budgets for power management
US8488323	Controlling minimum air inlet temperature using waste heat
US8533514	Power-capping based on ups capacity
US8645733	Virtualized application power budgeting
US8645734	Power aware memory allocation
US8718835	Optimized temperature-driven device cooling
US8782443	Resource-based adaptive server loading
US8849469	Data center system that accommodates episodic computation
US8904209	Estimating and managing power consumption of computing devices using power models
US8924781	Power capping based on generator capacity
US8930736	Inferred electrical power consumption of computing devices
US8978747	Deicing louvers for datacenter applications
US8984520	Resource modeling and scheduling for extensible computing platforms
US9003216	Power regulation of power grid via datacenter
US9026814	Power and load management based on contextual information
US9027027	Thread management based on device power state
US9063738	Dynamically placing computing jobs
US9069103	Localized weather prediction through utilization of cameras
US9071083	Super capacitor supplemented server power
US9092209	Wireless cloud-based computing for rural and developing areas
US9252598	Data planta raw material powered data generator
US9261933	Integrating energy budgets for power management
US9268394	Virtualized application power budgeting
US9416904	Gas supply shock absorber for datacenter power generation
US9483094	Backup power management for computing systems
US9519878	Power regulation of power grid via datacenter
US9563483	Server rack fuel cell
US9585291	Water condensate capture from datacenter power generation

Patent No.	Title
US9603282	Datacenter and cooling control fault-tolerance using compute resources
US9645629	Providing energy consumption analytics of cloud based service
US9655283	Submerged datacenter
US9801313	Underwater container cooling via integrated heat exchanger
US9817465	Low latency computer system power reduction
US9844167	Underwater container cooling via external heat exchanger
US9886316	Data center system that accommodates episodic computation
US9913409	Intrusion detection for submerged datacenters
US9933804	Server installation as a grid condition sensor
US9939862	Latency-based energy storage device selection