

Noticias

Las grandes empresas energéticas se apuntan al carro de la movilidad eléctrica, a través del [desarrollo de las llamadas electrolineras](#), puntos de recarga más rápidos que los actuales que pretenden ser el futuro ante la imparable transición energética. Iberdrola, Endesa y Repsol se han volcado en el diseño de infraestructuras de recarga para dar mucha mayor autonomía al vehículo enchufado. En esa misma línea la petrolera BP ha anunciado la [inversión de 20 millones de dólares](#) en StoreDot, compañía especializada en la innovación de baterías y materiales, con el objetivo de impulsar la adopción de vehículos eléctricos en todo el mundo.

Las [matriculaciones de vehículos eléctricos](#) en España se situaron en los seis primeros meses del año en 6.890 unidades, lo que representa un incremento del 123% respecto al mismo periodo del pasado año, según datos de la Asociación Empresarial para el Desarrollo e Impulso del Vehículo Eléctrico (AeDive). Madrid y Barcelona lideran el ranking de compra de vehículos eléctricos, tanto en su versión de eléctricos puros como en los híbridos enchufables.

Recientemente se ha aprobado en el Pleno del Congreso el [plan para Vehículos de Energías Alternativas, conocido como Plan](#)

[VEA](#), destinado a promover e incentivar la movilidad sostenible mediante ayudas a la compra de vehículos impulsados por energías alternativas y financiando parte de la infraestructura necesaria para su funcionamiento, tales como estaciones de recarga. La partida total de ayudas contempladas dentro del Plan VEA es de 66,6 millones de euros, de los que 50 millones estarán destinados a ayudas a la compra, mientras que los 16,6 millones restantes se destinarán a infraestructuras de movilidad sostenible gestionados por el Ministerio de Industria.

El [Ministerio de Industria](#) se ha comprometido con los fabricantes para lograr una transición ordenada hacia el vehículo alternativo y así cumplir con las exigentes restricciones de emisiones de la Unión Europea. La ministra Reyes Maroto expresó el compromiso de las Administraciones con el impulso de las energías alternativas e insistió en la oportunidad que representa la reducción de emisiones en las ciudades.

Todos los boletines que publica periódicamente la OEPM están disponibles en el siguiente enlace:

[BOLETINES OEPM](#)

CONTENIDO:

- **TECNOLOGÍAS VEHICULARES**
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- **INFRAESTRUCTURAS DE CARGA**
 - [Recarga de baterías](#)
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Solicitudes de Patente Publicadas

Los datos que aparecen en la tabla corresponden a una selección de las solicitudes de patentes publicadas durante el trimestre. Se puede acceder al documento completo haciendo doble clic sobre el mismo.

BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018081818	JOHNSON CONTROLS TECH CO	Model predictive battery power limit estimation systems and methods
WO 2018077637	BOSCH GMBH ROBERT LITHIUM ENERGY & POWER GMBH & CO KG	Battery cell having a structured active material
WO 2018082989	FREDY DOLL BETEILIGUNGS GMBH	Motor vehicle battery module, motor vehicle having an electric drive motor and a battery module, and method for producing a motor vehicle battery module and a motor vehicle
WO 2018082878	BOSCH GMBH ROBERT	Battery cell
WO 2018087681	JOHNSON CONTROLS TECH CO	Battery pack with gas discharging passage
WO 2018095725	BOSCH GMBH ROBERT	Battery unit for a vehicle with a separate communication unit
WO 2018095726	BOSCH GMBH ROBERT	System and method for storing a battery
WO 2018106093	LG CHEMICAL LTD	Flexible secondary cell
WO 2018103979	BOSCH GMBH ROBERT	Battery and method for producing a battery
WO 2018105957	SAMSUNG SDI CO LTD	Attachable/detachable battery component carrier, battery system comprising attachable/detachable battery component carrier, and automobile comprising battery system
WO 2018110133	HITACHI LTD	Secondary battery electrode, secondary battery, and method for producing same
WO 2018083431	MICHELIN & CIE	Unitary module for a battery pack, and battery pack
WO 2018089430	FISKER INC	All-solid state li ion batteries comprising mechanically flexible ceramic electrolytes and manufacturing methods for the same
WO 2018103946	BOSCH GMBH ROBERT	Method, machine-readable storage medium and electronic control unit for operating an electrical energy storage system, and corresponding electrical energy storage system
WO 2018110655	NISSAN MOTOR	Secondary battery electrode, and secondary battery
WO 2018077543	BOSCH GMBH ROBERT	Method, device, and system for evaluating a traction battery
WO 2018078024	TOTAL MARKETING SERVICES	Use of biodegradable hydrocarbon fluids in electric vehicles
WO 2018082871	BOSCH GMBH ROBERT LITHIUM ENERGY & POWER GMBH & CO KG	Energy storage device
WO 2018087679	JOHNSON CONTROLS TECH CO	Battery pack with housing made of two materials
WO 2018093712	INEVIT LLC	Non-welding joinder of exterior plates of a battery module
WO 2018095845	EMPA EIDGENOESSISCHE MAT UND FORSCHUNGSANSTALT	Li-ion based electrochemical energy storage cell
WO 2018099561	VOLVO TRUCK CORP	A method and system for controlling a battery in a vehicle
WO 2018102209	NANOTEK INSTRUMENTS INC	Graphene-protected lead acid batteries
WO 2018104051	BOSCH GMBH ROBERT	Device and method for forming waved corner sealed joints in layered sheet material
WO 2018105067	HITACHI CHEMICAL CO LTD	Lead acid storage battery
WO 2018105964	LG CHEMICAL LTD	Folding device for manufacturing electrode assembly and method for manufacturing stack/folding type electrode assembly
WO 2018103829	VOLVO TRUCK CORP	A method of estimating a charge state for a battery cell
WO 2018106026	SK INNOVATION CO LTD	Secondary battery module

WO 2018108728	LITHIUM ENERGY & POWER GMBH & CO KG	Battery
WO 2018117049	CALSONIC KANSEI CORP	Battery pack
WO 2018077549	PIERBURG GMBH	Drive system for an electrically driven motor vehicle
WO 2018083432	COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	Electrolytes containing a specific additive of the ionic liquid type for lithium batteries
WO 2018099566	VOLVO TRUCK CORP	A method for balancing an electrical energy storage module
WO 2018099955	DEUTSCHES ZENTRUM FUER LUFT UND RAUMFAHRT E V CIDETEC	Secondary cell, accumulator comprising one or more secondary cells, and method for charging and discharging
WO 2018106207	NEMCHYN ALEXANDR FEDOROVICH TODORASHKO GEORGII TIMOFEEVYCH KORBUT SERHEI NIKOLAEVICH	Method and heat pump for recovering heat energy
WO 2018105134	HITACHI CHEMICAL CO LTD	Liquid lead-acid battery, method for charging/discharging liquid lead-acid battery, and power supply system
WO 2018105864	LG CHEMICAL LTD	Battery pack and automobile comprising same battery pack
WO 2018105809	LSIS CO LTD	Portable charger for electric car
WO 2018110395	YAMAHA MOTOR CO LTD	Battery pack
WO 2018073807	MAGNETI MARELLI SPA	Electric power system provided with a dual-voltage storage assembly for a vehicle
WO 2018091490	BLUE SOLUTIONS	Analogue overall balancing system for an assembly of capacitive-effect electrical energy storage devices, rechargeable storage module, electric vehicle and electrical installation comprising such a system
WO 2018095728	BOSCH GMBH ROBERT	Battery, a battery system and a method for exchanging at least one component of a battery
WO 2018099727	BOSCH GMBH ROBERT LITHIUM ENERGY & POWER GMBH & CO KG	Method and circuit arrangement for pre-indication of dendrite formation in an electrode assembly of a battery cell and battery cell
WO 2018100297	ARKEMA FRANCE UNIV DE TOURS FRANCOIS RABELAIS	Improving the ion conductivity of an electrolyte based on lithium imidazolate salts
WO 2018106015	HYOSUNG COPORATION	Method and apparatus for estimating lifespan of battery
WO 2018111446	BENDIX COMMERCIAL VEHICLE SYSTEMS LLC	Front end motor-generator system and hybrid electric vehicle operating method
WO 2018111453	BENDIX COMMERCIAL VEHICLE SYSTEMS LLC	Driver break preparation system for a hybrid vehicle
WO 2018115024	FORTU NEW BATTERY TECH GMBH	Electrode separator element comprising a ceramic separator layer
WO 2018087680	JOHNSON CONTROLS TECH CO	Battery pack with two end plates
WO 2018099730	BOSCH GMBH ROBERT LITHIUM ENERGY & POWER GMBH & CO KG	Electrode assembly for a battery cell and battery cell
WO 2018103604	ZHENGZHOU YUTONG BUS CO LTD	Power output control method and device, and power feedback control method and device
WO 2018105981	SAMSUNG SDI CO LTD	Removable battery component carrier, battery system including removable battery component carriers and vehicle including the battery system
WO 2018106054	SAMSUNG SDI CO LTD	Secondary battery
WO 2018110232	SANYO ELECTRIC CO	Electrical equipment battery for vehicles
WO 2018111468	BENDIX COMMERCIAL VEHICLE SYSTEMS LLC	Front end motor-generator system and hybrid electric vehicle operating method
WO 2018110444	CIP SOFTWARE CORP	Magnesium air battery capable of long-term power supply and electronic machine

WO 2018062226	HITACHI AUTOMOTIVE SYSTEMS LTD	Battery module, and battery pack
WO 2018062844	LG CHEMICAL LTD	Lithium secondary battery negative electrode including protection layer made of conductive fabric, and lithium secondary battery including same
WO 2018066792	LG CHEMICAL LTD	Battery protection system and method
WO 2018068663	GRST INTERNATIONAL LTD	Anode slurry for lithium ion battery
WO 2018069434	BAYERISCHE MOTOREN WERKE AG	Battery cell comprising a temperature sensor
WO 2018074773	SAMSUNG SDI CO LTD	Secondary battery
WO 2018080182	SAMSUNG SDI CO LTD	Battery module
WO 2018080071	SAMSUNG SDI CO LTD	Electrode for lithium secondary battery and lithium secondary battery comprising same
WO 2018080033	SAMSUNG SDI CO LTD	Battery module having fixing structure for temperature sensor
WO 2018079164	HITACHI AUTOMOTIVE SYSTEMS LTD	Battery control device
WO 2018079190	MURATA MANUFACTURING CO	Positive electrode material, positive electrode, cell, cell pack, electronic device, electric vehicle, electric storage device, and electric power system
WO 2018084320	NISSAN MOTOR	Positive electrode for lithium-ion battery, and lithium-ion battery
WO 2018087928	HITACHI CHEMICAL CO LTD	Negative electrode material for lithium ion secondary battery, negative electrode for lithium ion secondary battery, and lithium ion secondary battery
WO 2018088685	SAMSUNG SDI CO LTD	Battery pack
WO 2018088320	HONDA MOTOR CO LTD	Electrode for nonaqueous electrolyte secondary batteries, and nonaqueous electrolyte secondary battery provided with same
	NICHIA CORP	
WO 2018093032	LG CHEMICAL LTD	Lithium-sulfur battery
WO 2018097330	DAINIPPON PRINTING CO LTD	Battery packaging material, production method thereof, and battery
WO 2018097451	LG CHEMICAL LTD	Positive electrode active material particles each comprising core containing lithium cobalt oxide and shell containing lithium cobalt phosphate and method for manufacturing same
WO 2018109055	REINZ DICHTUNG GMBH	Housing cover and housing having connection point
WO 2018062202	TOSHIBA KK TOSHIBA INFRASTRUCTURE SYSTEMS & SOLUTIONS CORP	Nonaqueous electrolyte battery and battery pack
WO 2018061457	HITACHI AUTOMOTIVE SYSTEMS LTD	Lithium ion secondary cell
WO 2018079950	OH TERESA	Bidirectional transistor and leakage current breaker using same
WO 2018079423	SANYO ELECTRIC CO	Polygonal secondary battery
WO 2018080183	SAMSUNG SDI CO LTD	Battery system and electric vehicle comprising same
WO 2018080080	SAMSUNG SDI CO LTD	Secondary battery
WO 2018088735	LG CHEMICAL LTD	Anode and method for fabricating same
WO 2018087970	MURATA MANUFACTURING CO	Solid battery, method for manufacturing solid battery, battery pack, vehicle, electricity storage system, electric tool, and electronic apparatus
WO 2018090179	CONTEMPORARY AMPEREX TECH CO LIMITED	Secondary battery
WO 2018096821	DENSO CORP	Vehicle cruise control device
WO 2018097054	SHOWA DENKO PACKAGING CO LTD	Power storage device exterior case and production method therefor
	SHOWA DENKO KK	
WO 2018096972	AIST TANAKA CHEMICAL CORP NEC CORP	Lithium-manganese complex oxide and method for producing same
WO 2018101618	LG CHEMICAL LTD	Battery cell-degassing device

WO 2018101808	SAMSUNG SDI CO LTD	Nickel active material precursor for lithium secondary battery, method for producing nickel active material precursor, nickel active material for lithium secondary battery produced by method, and lithium secondary battery having cathode containing nickel active material
WO 2018065473	ACCUMULATEURS FIXES	Battery
WO 2018069799	SEMICONDUCTOR ENERGY LAB	Positive electrode active material particle and manufacturing method of positive electrode active material particle
WO 2018074752	LG CHEMICAL LTD	Battery pack
WO 2018080010	LG CHEMICAL LTD	Battery pack having battery edge surface to which direct cooling method is applied
WO 2018080022	LG CHEMICAL LTD	Vehicle battery pack and automobile comprising same
WO 2018080237	RENAULT SAMSUNG MOTORS CO LTD	Battery charge control device and method for electric vehicle to adjust charge termination time according to state of charge of battery
WO 2018081639	INEVIT LLC	Battery module endplate with sealed hole for cooling tube connection
WO 2018083657	TE CONNECTIVITY CORP TYCO ELECTRONICS JAPAN G K	Connector assembly for a battery system
WO 2018084442	LG CHEMICAL LTD	Battery pack including tray stopper for blocking pack cover from springing back
WO 2018084501	LG CHEMICAL LTD	Battery pack
WO 2018084563	SAMSUNG SDI CO LTD	Secondary battery
WO 2018088058	TOPPAN PRINTING CO LTD	Laminate green sheet, laminate sintered body, and all-solid secondary battery, and production method therefor
WO 2018086095	SHANGHAI DINHO NEW MATERIAL TECH CO LTD	Multi-layered composite functional separator for lithium-ion battery
WO 2018088577	WOLVERINE KOREA CO LTD	Gasket for lithium ion battery pack
WO 2018092434	MURATA MANUFACTURING CO	All-solid-state battery, electronic device, electronic card, wearable device, and electric vehicle
WO 2018093038	LG CHEMICAL LTD	Battery module, and battery pack comprising same
WO 2018097536	LG CHEMICAL LTD	Battery management apparatus
WO 2018097555	LG CHEMICAL LTD	Pretreatment method for lithium electrode, and lithium metal battery
WO 2018101806	SAMSUNG SDI CO LTD	Nickel active material precursor for lithium secondary battery, method for producing nickel active material precursor, nickel active material for lithium secondary battery produced by method, and lithium secondary battery having cathode containing nickel active material
WO 2018101702	RENAULT SAMSUNG MOTORS CO LTD	Electric vehicle charging system capable of inter-vehicle charging
WO 2018101619	LG CHEMICAL LTD	Battery cell-degassing device
WO 2018067565	JOHNSON CONTROLS TECH CO ZHANG ZHENLI JIN ZHIHONG H WYATT PERRY M	State of charge dependent plating estimation and prevention
WO 2018070703	LG CHEMICAL LTD	Multilayer anode having, in each layer, different amounts of binder and different active material grain size, and lithium secondary battery comprising same
WO 2018070302	TOYO KOHAN CO LTD	Current collector for battery, and battery
WO 2018080181	SAMSUNG SDI CO LTD	Connector for printed circuit board and battery system comprising printed circuit board and connector
WO 2018080087	SAMSUNG SDI CO LTD	Battery system comprising real-time clock to which power is supplied internally, and power supply circuit for real-time clock
WO 2018083932	CALSONIC KANSEI CORP UNIV KEIO	Charging rate estimation device and charging rate estimation method
WO 2018087131	JAGUAR LAND ROVER LTD	Battery support arrangement

WO 2018088311	MAXELL HOLDINGS LTD	Negative electrode for non-aqueous-electrolyte-based electrochemical element, method for manufacturing said electrode, lithium-ion secondary cell, and method for manufacturing said cell
WO 2018090180	CONTEMPORARY AMPEREX TECH CO LIMITED	Secondary battery
WO 2018092677	KUREHA CORP	Electrode mix, method for producing electrode mix, electrode structure, method for producing electrode structure, and secondary battery
WO 2018093059	KOREA INSTITUTE OF INDUSTRIAL TECH	High ion conductive solid electrolyte for all-solid state battery and method for preparing same
WO 2018101072	PANASONIC IP MAN CO LTD	Negative electrode material and nonaqueous electrolyte secondary battery
WO 2018101474	ASAHI CHEMICAL IND	Inorganic particles for nonaqueous electrolyte battery
WO 2018101501	KLINEX & COMPANY INC	System and method for electric vehicle charging service
WO 2018061551	DENSO CORP	Equipment temperature adjusting apparatus
WO 2018062338	SANYO ELECTRIC CO	Angular secondary battery and method for manufacturing same
WO 2018066931	LG CHEMICAL LTD	Anode for lithium metal secondary battery and lithium metal secondary battery comprising same
WO 2018066633	AIST TANAKA CHEMICAL CORP NEC CORP	Titanium- and/or germanium-substituted lithium manganese composite oxide and method for producing same
WO 2018065438	JOHNSON CONTROLS ADVANCED POWER SOLUTIONS GMBH	Energy storage system
WO 2018071762	INEVIT INC	Battery module compartment chamber and battery module mounting area of an energy storage system and method thereof
WO 2018074442	MITSUBISHI PAPER MILLS LTD	Separator for electrochemical elements, and electrochemical element comprising same
WO 2018075219	NANOTEK INSTRUMENTS INC	Battery having a low output voltage
WO 2018088691	SAMSUNG SDI CO LTD	Battery pack
WO 2018088424	DAIICHI KIGENSO KAGAKU KOGYO NATIONAL INSTITUTE OF TECH	Lithium-containing zirconium phosphate, calcined powder of same, and method for producing sintered body
WO 2018088127	SANDEN AUTOMOTIVE CLIMATE SYSTEMS CORP	Accumulator
WO 2018092468	MURATA MANUFACTURING CO	Secondary battery electrolyte, secondary battery, battery pack, electric vehicle, electrical power storage system, power tool, and electronic device
WO 2018095415	ZHENGZHOU YUTONG BUS CO LTD	Battery voltage-based battery protection method and device
WO 2018097191	SUMITOMO METAL MINING CO TOYOTA JIDOSHA KABUSIKI KAISHA	Positive electrode active substance for nonaqueous electrolyte secondary cell, and nonaqueous electrolyte secondary cell
WO 2018101725	LG CHEMICAL LTD	Cleaning device, provided with cleaning roll, for protective film for battery cell production
WO 2018101695	SAMSUNG SDI CO LTD	Wall structure of battery cell, battery sub-module, battery module, or battery system
WO 2018107140	FEASIBLE INC	Nonlinear acoustic resonance spectroscopy (nars) for determining physical conditions of batteries
WO 2018066960	LG CHEMICAL LTD	Separation film for lithium ion secondary battery, and lithium ion secondary battery including same
WO 2018066968	LG CHEMICAL LTD	Electrode assembly having improved heat stability
WO 2018066729	PMGROW CORP	Battery management system and battery module assembly comprising same
WO 2018070941	AGENCY FOR SCIENCE TECH AND RESEARCH	A polymer composition
WO 2018080002	SAMSUNG SDI CO LTD	Battery pack
WO 2018080280	LG CHEMICAL LTD	Battery pack

WO 2018079391	PANASONIC IP MAN CO LTD	Non-aqueous electrolyte secondary cell
WO 2018079970	SAMSUNG ELECTRONICS CO LTD	Charging apparatus for electric vehicle and charging control method for electric vehicle
WO 2018084319	NISSAN MOTOR	Negative electrode for lithium-ion battery, and lithium-ion battery
WO 2018094303	MOSSEY CREEK TECH INC	Thixotropic nanoparticle silicon anodes and deoxygenated lithium metal oxide cathodes
WO 2018090853	NIO NEXTEV LTD	Electric vehicle controller
WO 2018100815	ASAHI CHEMICAL IND	Nonaqueous electrolyte battery inorganic particles, and nonaqueous electrolyte battery using these
WO 2018101809	SAMSUNG SDI CO LTD	Nickel active material precursor for lithium secondary battery, method for producing nickel active material precursor, nickel active material for lithium secondary battery produced by method, and lithium secondary battery having cathode containing nickel active material
WO 2018101807	SAMSUNG SDI CO LTD	Nickel active material precursor for lithium secondary battery, method for producing nickel active material precursor, nickel active material for lithium secondary battery produced by method, and lithium secondary battery having cathode containing nickel active material
WO 2018062046	FUJIFILM CORP	Aluminum member for electrodes and method for producing aluminum member for electrodes
WO 2018061478	HITACHI AUTOMOTIVE SYSTEMS LTD	Lithium ion secondary battery
WO 2018093194	SAMSUNG SDI CO LTD	Secondary battery, electrode assembly and method for manufacturing electrode assembly
WO 2018097250	AIST	Electrode active material for nonaqueous secondary batteries, and nonaqueous secondary battery using same
WO 2018097429	POSCO ES MAT CO LTD	Lithium titanium composite oxide, preparation method therefor, and lithium secondary battery comprising same
WO 2018097136	SUMITOMO METAL MINING CO	Transition metal-containing composite hydroxide and production method thereof, and production method of positive electrode active substance for non-aqueous electrolyte secondary battery
WO 2018097500	LG CHEMICAL LTD	Battery pack comprising gasket compression limiter
WO 2018062920	LG CHEMICAL LTD	Method for sealing pouch case of secondary battery
WO 2018059074	HUAWEI TECH CO LTD	Detection method and device for micro short circuit of battery
WO 2018070116	DENSO CORP	Cooling device
WO 2018070684	LG CHEMICAL LTD	Diagnostic device and power supply system comprising same
WO 2018074174	HITACHI LTD	Lithium secondary battery
WO 2018074807	LG CHEMICAL LTD	Method and system for effective battery cell balancing through duty control
WO 2018074538	GS YUASA INT LTD	Vehicle power storage device, vehicle discharge system, discharge control method, and vehicle power storage element
WO 2018074744	LG CHEMICAL LTD	Device and method for diagnosing switch using voltage distribution
WO 2018084439	SAMSUNG SDI CO LTD	Battery system
WO 2018094464	UNIV MONASH	Lithium-sulfur energy storage cell and hybrid cell having capacitive energy storage and discharge capability
WO 2018097137	SUMITOMO METAL MINING CO	Transition metal-containing composite hydroxide and production method thereof, positive electrode active substance for non-aqueous electrolyte secondary battery and production method thereof, and non-aqueous electrolyte secondary battery
WO 2018066672	DAINIPPON PRINTING CO LTD	Packaging material for battery, manufacturing method therefor, and battery
WO 2018066928	LG CHEMICAL LTD	Cathode active material for secondary battery and secondary battery comprising same
WO 2018068819	KAERCHER GMBH & CO KG ALFRED	Electric energy storage device and electric device
WO 2018071829	INEVIT LLC	Optical communications interface for battery modules of an energy storage system
WO 2018074363	HITACHI LTD	Power storage cell system
WO 2018074846	SAMSUNG SDI CO LTD	Secondary battery
WO 2018084252	NISSAN MOTOR	Electrode for cell, and cell

WO 2018088090	MURATA MANUFACTURING CO	Electrolyte solution for secondary batteries, secondary battery, battery pack, electric vehicle, electrical energy storage system, electric tool and electronic device
WO 2018090768	HUAWEI TECH CO LTD	Charge and discharge device
WO 2018097695	LG CHEMICAL LTD	Cathode active material for lithium-sulfur battery, comprising metal sulfide nanoparticles, and method for producing same
WO 2018108714	LITHIUM ENERGY & POWER GMBH & CO KG	Method for monitoring a discharge device of a battery
WO 2018061761	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Electricity storage module
WO 2018075538	UNIV ILLINOIS	Protected anodes and methods for making and using same
WO 2018074842	SAMSUNG SDI CO LTD	Secondary battery and module for same
WO 2018084514	SAMSUNG SDI CO LTD	Secondary battery
WO 2018088798	LG CHEMICAL LTD	Battery cell comprising tap and lead which have compact coupling structure
WO 2018097316	MURATA MANUFACTURING CO	Negative electrode, battery, battery pack, electronic device, electric vehicle, electric storage device, and electric power system
WO 2018095646	BOSCH GMBH ROBERT	Active material for a positive electrode of a battery cell, positive electrode, and battery cell
WO 2018096999	AIST	Lithium-manganese complex oxide and method for producing same
WO 2018061375	SHOWA DENKO PACKAGING CO LTD	Packaging material, and method for producing same
WO 2018062231	HITACHI AUTOMOTIVE SYSTEMS LTD	Square-shaped secondary battery
WO 2018066728	PMGROW CORP	Method and device for suppressing combustion inside battery pack
WO 2018070373	CALSONIC KANSEI CORP	Assembled battery
WO 2018072024	HYDRO QUEBEC	Sulphamic acid derivatives and production methods thereof
WO 2018081224	UNIV MICHIGAN REGENTS	Metal infiltrated electrodes for solid state batteries
WO 2018084843	FORD MOTOR CO	Renewable energy vehicle charging
WO 2018097743	OBCESTVO S OGRANICHENNOJ OTVETSTVENNOSTJU SMARTER SHVED ANDREJ ALEKSANDROVICH	Method for controlling an energy storage device of a transport vehicle
WO 2018066670	DAINIPPON PRINTING CO LTD	Packaging material for battery, manufacturing method thereof, and battery
WO 2018066163	TOYO TIRE & RUBBER CO	Method for producing flexible permanent magnet, flexible permanent magnet, deformation detection sensor, and deformation detection method
WO 2018097329	DAINIPPON PRINTING CO LTD	Packaging material for batteries, method for producing same, and battery
WO 2018096966	DENSO CORP	Power supply device
WO 2018097594	LG CHEMICAL LTD	Positive electrode for secondary battery, method for manufacturing same and lithium secondary battery comprising same
WO 2018097519	SK CHEMICALS CO LTD	Electrolyte solution for secondary battery and secondary battery comprising same
WO 2018093214	LG CHEMICAL LTD	Separator and electrochemical element comprising same
WO 2018071840	INEVIT LLC	Battery junction box housing configured to direct crash forces in an electric vehicle

WO 2018096931	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Wiring module
WO 2018087682	JOHNSON CONTROLS TECH CO	Battery pack
WO 2018097523	SK CHEMICALS CO LTD	Electrolyte solution for secondary battery and secondary battery comprising same
WO 2018066110	NEC CORP	Spacer Included Electrodes Structure and Its Application for High Energy Density and Fast Chargeable Lithium Ion Batteries
WO 2018066162	TOYO TIRE & RUBBER CO	Method for producing flexible permanent magnet, flexible permanent magnet, deformation detection sensor, and deformation detection method
WO 2018071825	INEVIT LLC	Cylindrical battery cell configured with insulation component, and battery module containing the same

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SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018072829	BOSCH GMBH ROBERT	Energy storage devices and methods for controlling an energy storage device
WO 2018087446	RENAULT SAS NISSAN MOTOR	Method for controlling a three-phase rectifier for a charging device on board an electric or hybrid vehicle
WO 2018065927	VALEO JAPAN CO LTD BERTRAND MATHIEU SACCO ERNESTO NAIM ALDO	Circuit for discharging a high-voltage electrical system
WO 2018075793	SAN DIEGO STATE UNIV RESEARCH FOUNDATION	Methods and circuitry for fault detection and automatic equalizers for battery packs

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SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018110242	DENSO CORP	Control device for rotating electrical machine, and rotating electrical machine system
WO 2018087040	MAGNA STEYR FAHRZEUGTECHNIK AG & CO KG	Motor vehicle comprising a generator and a generator controller
WO 2018105150	SHIRAI MASAO	Gravity-based power generation system
WO 2018088110	DENSO CORP	Drive system
WO 2018060077	FRANCESHELLI ROMANO	Device for converting mechanical energy into electric power
WO 2018096784	DENSO CORP	Auxiliary machine device and air-conditioning system
WO 2018061400	HITACHI LTD	Combined power storage system
WO 2018066625	DENSO CORP	Rotary electric machine control device
WO 2018096218	NORMET OY	Method and arrangement for actuating power pack
WO 2018086218	HUAWEI TECH CO LTD	Method and device for recovering vehicle braking energy
WO 2018061047	I E T S P A	Motor vehicle with simulator of performance of a mechanical gearbox
WO 2018073682	HUYNH CONG NHAN	Energy storage device

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MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018091163	VOLKSWAGEN AG	Wave winding coil for a stator laminated core of an electrical machine
WO 2018105407	DENSO CORP	Dynamo-electric machine control device
WO 2018091307	BAYERISCHE MOTOREN WERKE AG	Pyrotechnic switch and intermediate circuit discharge system
WO 2018110197	NTN TOYO BEARING CO LTD	Drive module
WO 2018078560	FRENI BREMBO SPA	Electronic system for controlling traction and braking of a vehicle and related method
WO 2018082973	JAGUAR LAND ROVER LTD	Cooling of an electrical machine
WO 2018104965	KUMAR MAINI CHETAN	Battery swapping systems and methods
WO 2018073027	BAYERISCHE MOTOREN WERKE AG	Fastening device for an electric motor vehicle drive unit
WO 2018080996	MICROCHIP TECH INC	Closed loop flux weakening for permanent magnet synchronous motors
WO 2018072013	DYNACIRCUMOTION LTD	Rotatable electric machines
WO 2018078890	NTN TOYO BEARING CO LTD	In-wheel motor drive device
WO 2018079359	HITACHI AUTOMOTIVE SYSTEMS LTD	Motor control device
WO 2018061578	KOMATSU MFG CO LTD	Power transmission device for work vehicle
WO 2018079059	JFE STEEL CORP	Nonoriented electromagnetic steel sheet and method for producing same
WO 2018070055	NTN TOYO BEARING CO LTD	In-wheel motor drive device
WO 2018098567	TM4 INC	Electric machine provided with an enclosed cooling assembly paired to an open cooling assembly
WO 2018101402	HITACHI METALS LTD	R-f-b sintered magnet and production method therefor
WO 2018087882	MITSUBISHI ELECTRIC CORP	Dynamo-electric machine
WO 2018102428	CUMMINS INC	Systems and methods for controlling a hybrid engine system
WO 2018101239	SHINETSU CHEMICAL CO	R-fe-b sintered magnet and production method therefor
WO 2018078379	WILLIAMS ADVANCED ENGINEERING LTD	A heating and cooling system for an electric vehicle
WO 2018077265	BYD CO LTD	Power train system and vehicle having same
WO 2018083810	NTN TOYO BEARING CO LTD	In-wheel motor drive device
WO 2018070057	NTN TOYO BEARING CO LTD	In-wheel motor drive device and speed reduction device
WO 2018083808	NTN TOYO BEARING CO LTD	In-wheel motor drive device
WO 2018086679	GKN AUTOMOTIVE LTD	Engine gearbox assembly for a motor vehicle and method for producing an engine gearbox assembly
WO 2018092027	TVS MOTOR CO LTD	Control system for assisting an internal combustion engine
WO 2018087689	TVS MOTOR CO LTD	An electrical machine with a stator having multiple sections winding coil and switch combinations
WO 2018062656	HANON SYSTEMS	Bldc motor
WO 2018093108	C STONE TECH CO LTD	Triple clutch and actuator thereof
WO 2018071776	INEVIT LLC	Contact plate including at least one bonding connector configured to establish electrical bonds to terminals of at least one group of battery cells in a battery module

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CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018104177	SIEMENS AG	Highly efficient power converter for three-phase systems
WO 2018105323	DENSO CORP	Drive system
WO 2018072925	BOSCH GMBH ROBERT	Power module
WO 2018095632	BOSCH GMBH ROBERT	Protective device for an electric drive system, electric drive system, and method for operating an electric drive system
WO 2018110071	HITACHI AUTOMOTIVE SYSTEMS LTD	Busbar structure and power conversion device using same
WO 2018091145	PORSCHE AG	Control circuit
WO 2018105425	SUMITOMO WIRING SYSTEMS	Wire harness protecting member
WO 2018078801	MITSUBISHI ELECTRIC CORP	Vehicle power conversion device
WO 2018078705	MITSUBISHI ELECTRIC CORP	Semiconductor device and method for manufacturing same
WO 2018090772	BYD CO LTD	Load controller and electric vehicle having the load controller
WO 2018099467	BYD CO LTD	Electric vehicle, dc-dc convertor, and control method for dc-dc convertor
WO 2018066441	DENSO CORP	Control device for rotary electric machine
WO 2018079141	PANASONIC IP MAN CO LTD	Heat-dissipating structure and onboard power supply device using same
WO 2018097020	DENSO CORP	Rotary electric machine
WO 2018061814	PANASONIC IP MAN CO LTD	Power supply device
WO 2018070110	DENSO CORP	Current sensor device
WO 2018070185	HITACHI AUTOMOTIVE SYSTEMS LTD	Dc-dc converter and automobile
WO 2018078734	MITSUBISHI ELECTRIC CORP	Power conversion device
WO 2018100626	HITACHI LTD HITACHI BUILDING SYST CO LTD	System for controlling permanent magnet synchronous motor, and method for controlling permanent magnet synchronous motor
WO 2018062324	DENSO CORP	Power supply control device
WO 2018079052	PANASONIC IP MAN CO LTD	Apparatus for controlling brushless motor and method for controlling brushless motor
WO 2018099468	BYD CO LTD	Electric vehicle, dc-dc convertor, and control method for dc-dc convertor
WO 2018083813	MITSUBISHI ELECTRIC CORP	Power conversion device
WO 2018066165	MITSUBISHI ELECTRIC CORP	Signal transmission circuit and power conversion device
WO 2018072953	BOSCH GMBH ROBERT	Dc-dc converter and method for controlling a dc-dc converter
WO 2018079664	TOYOTA CHUO KENKYUSHO KK	Power supply device and control method for power supply device
WO 2018097170	DENSO CORP	Vehicle control apparatus, vehicle control method, and recording medium having vehicle control program recorded thereon
WO 2018066042	HONDA MOTOR CO LTD	Conversion device, equipment, and control method

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RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018082867	CONTINENTAL AUTOMOTIVE GMBH	Method for guiding a motor vehicle into a charging position at an inductive charging station, and control device and motor vehicle
WO 2018086770	INNOGY SE	Measuring transducer
WO 2018086788	INNOGY SE	Charging station, electric vehicle and system having a charging station and an electric vehicle
WO 2018099731	AUDI AG	Discharging a battery module, having at least two battery cells, of a battery having at least two battery modules
WO 2018068903	BAYERISCHE MOTOREN WERKE AG	Method for controlling the electrical charging of a group of vehicles
WO 2018086768	VOLKSWAGEN AG	Inductive charging station and method for controlling an inductive charging station
WO 2018099215	CHENGDU E CHARGING WIRELESS POWER TECH CO LTD	System, device and method for optimizing wireless charging by means of load modulation
WO 2018105885	SAMSUNG SDI CO LTD	Control unit for a battery system
WO 2018104314	BOSCH GMBH ROBERT BOSCH AUTOMOTIVE PROD SUZHOU	Electric vehicle, and control device and method therefor
WO 2018104234	LEONI KABEL GMBH	High-current cable and power supply system with high-current cable
WO 2018069356	IN2POWER NV	Energy transmitter and receiver module
WO 2018077749	BAYERISCHE MOTOREN WERKE AG	Electric vehicle with charging cable identification device
WO 2018082933	BAYERISCHE MOTOREN WERKE AG	Charging station device with one or more charging stations for an inductive charging process
WO 2018087442	RENAULT SAS NISSAN MOTOR	Method for controlling a three-phase rectifier for a charging device on board an electrical or hybrid vehicle
WO 2018072987	BOSCH GMBH ROBERT	Dc-to-dc converter and method for operating a dc-to-dc converter
WO 2018081306	JOHNSON CONTROLS TECH CO	Battery module parallel switching device systems and methods
WO 2018082899	BAYERISCHE MOTOREN WERKE AG	Method for carrying out a charging operation at a charging station
WO 2018091308	BAYERISCHE MOTOREN WERKE AG	Safety procedure, device for the implementation thereof, and hybrid or electric vehicle
WO 2018096001	AUDI AG	A ferrying vehicle providing onboard charging, an electric automobile and a method for charging an electric automobile on board the ferrying vehicle
WO 2018095846	SUMIDA COMPONENTS & MODULES GMBH	Inductive component and secondary resonator device for installing on an electric vehicle
WO 2018105383	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	In-vehicle power supply device
WO 2018105342	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Battery monitoring device protection circuit and battery monitoring device
WO 2018110416	NEC CORP	Charging system, charging controller, charger, user terminal, charging method, and recording medium
WO 2018111400	GEN ELECTRIC	Dc leakage current detector and method of operation thereof for leakage current detector in dc power circuits
WO 2018069192	VOLKSWAGEN AG	Intelligent charge communication switching in can-based charging systems

WO 2018069096	CONTINENTAL AUTOMOTIVE GMBH	Method for operating a charger for charging an electrical energy store from a home network, charger for a motor vehicle, and motor vehicle
WO 2018072799	NERVE SMART SYSTEMS APS	Charging station for charging electrical vehicles
WO 2018077503	BOSCH GMBH ROBERT	Charging device for an electric energy store, electric energy storage system, and method for charging an electric energy store
WO 2018095868	ELAPHE POGONSKE TEHNOLOGIJE D O O	Integrated electric gear and charger system for battery powered electric vehicles
WO 2018099911	BOMBARDIER PRIMOVE GMBH	A method and a device for determining a switching current of a converter of a system for inductive power transfer and a method of control
WO 2018108495	BAYERISCHE MOTOREN WERKE AG	Electrical machine arrangement
WO 2018111507	GEN ELECTRIC	System and method for leakage current and fault location detection in electric vehicle dc power circuits
WO 2018079679	TOSHIBA KK TOSHIBA INFRASTRUCTURE SYSTEMS & SOLUTIONS CORP	Charging system
WO 2018065435	BAYERISCHE MOTOREN WERKE AG	Inductive charging unit for a vehicle
WO 2018081549	VOLTSERVER INC	Digital power multiport battery charging system
WO 2018091456	JAGUAR LAND ROVER LTD	A notification system for an electric vehicle, an electric vehicle, and a method
WO 2018096341	DYSON TECH LIMITED	Battery system
WO 2018108386	BAYERISCHE MOTOREN WERKE AG	Charging device for an energy store of a motor vehicle, and also electrical machine arrangement which is equipped with said charging device
WO 2018110243	DENSO CORP	Battery unit, and power supply system
WO 2018077427	ZAPTEC IP AS	Electric vehicle charging system for existing infrastructure
WO 2018080236	RENAULT SAMSUNG MOTORS CO LTD	Electric vehicle charged by selecting charging module enabling faster charging between wired and wireless charging module, and charging device for same
WO 2018086884	EASE LINK GMBH	Vehicle connection device, vehicle connection system and vehicle
WO 2018101926	FORD MOTOR CO	Methods and apparatus for vehicle-based drone charging
WO 2018108997	TECHNISCHE HOCHSCHULE MITTELHESSEN	Apparatus for coordinated reactive power production and control, and virtual reactive power plant based thereon
WO 2018062394	GS YUASA INT LTD	Power storage element soc estimation device, power storage device, and power storage element soc estimation method
WO 2018061748	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Vehicle power supply device
WO 2018061449	HITACHI AUTOMOTIVE SYSTEMS LTD	Battery control device, battery system, and vehicle
WO 2018065451	BAYERISCHE MOTOREN WERKE AG	Coil unit for inductively charging a vehicle
WO 2018069542	PHOENIX CONTACT E MOBILITY GMBH	Temperature-monitored charging system for transmitting electric charge currents
WO 2018079360	HITACHI AUTOMOTIVE SYSTEMS LTD	Battery control device, battery pack, and battery system
WO 2018101005	HITACHI AUTOMOTIVE SYSTEMS LTD	Battery control device
WO 2018076016	HEVO INC	Parking alignment sequence for wirelessly charging an electric vehicle

WO 2018076213	SHENZHEN WOER HEAT SHRINKABLE MAT CO LTD SHENZHEN WOER NEW ENERGY ELECTRICAL TECH CO LTD SHENZHEN WOER SPECIAL WIRE&CABLE CO LTD CHANGZHOU WOER HEAT SHRINKABLE MAT CO LTD LTK ELECTRIC WIRE HUIZHOU LTD HUIZHOU LTK ELECTRONIC CABLE LTD	Wireless charging power coil, wireless charging system and wireless charging control method
WO 2018088354	HITACHI CONSTRUCTION MACH CO	Hybrid construction machine
WO 2018091192	BOSCH GMBH ROBERT	Device for inductively charging an electric vehicle, and method for detecting electrically conductive foreign bodies in such a device
WO 2018095971	TE CONNECTIVITY GERMANY GMBH	Mains plug and charging system for a motor vehicle
WO 2018061415	HONDA MOTOR CO LTD	Route searching apparatus, battery information management apparatus, and program
WO 2018061857	NEC CORP	Charging system, charging controller, charger, information device, charging method, and recording medium
WO 2018072477	NEXTEV LTD	Electric vehicle power battery precharging system and device
WO 2018095651	BAYERISCHE MOTOREN WERKE AG	Locking device having shape memory alloy for an energy storage device of a motor vehicle and method for operating such a locking device
WO 2018060153	PHOENIX CONTACT E MOBILITY GMBH	Plug connector part for a charging system
WO 2018065597	BOSCH GMBH ROBERT	Battery unit and method for operating a battery unit
WO 2018074021	MURATA MANUFACTURING CO	Charging-discharging device, charging-discharging method, electronic device, electric vehicle and powering system
WO 2018084151	HONDA MOTOR CO LTD	Server device and control method
WO 2018066624	DENSO CORP	Power supply system control device
WO 2018084152	HONDA MOTOR CO LTD	Power storage device, transportation apparatus, and control method
WO 2018092562	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Vehicle battery monitoring device and vehicle battery monitoring system
WO 2018097739	AUCKLAND UNISERVICES LTD BOYS JOHN TALBOT COVIC GRANT ANTHONY	Current distribution and thermal regulation in inductive power transfer coupling structures
WO 2018059416	HUAWEI TECH CO LTD	Electric car, and method of providing power charging between electric cars
WO 2018066323	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Vehicle battery monitoring device and vehicle battery monitoring system
WO 2018083949	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Vehicular battery monitoring device and vehicular battery monitoring system
WO 2018085519	WITRICITY CORP	Vehicle charger network
WO 2018073961	NISSAN MOTOR	Power supply system and method for controlling same
WO 2018078625	CHAKRATEC LTD	System and method for a station providing grid support

WO 2018091697	RUTRONIK ELEKTRONISCHE BAUELEMENTE GMBH	Hybrid energy storage system
WO 2018092751	KUWATA CO LTD NIPPON LSA INC POWDEC KK INSTITUTE FOR ENERGY APPLICATION TECH CO LTD	Electricity storage module and electricity storage module quick charging system
WO 2018086769	INNOGY SE	Charging station foundation and charging station

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CAMBIO DE BATERÍAS

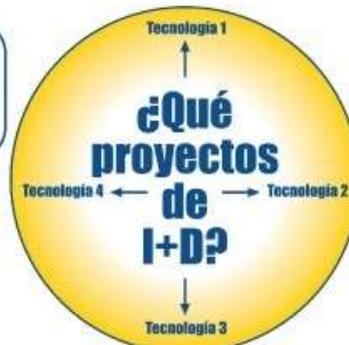
Nº PUBLICACIÓN	SOLICITANTE	Contenido técnico
WO 2018104966	KUMAR MAINI CHETAN	A rechargeable battery management system
WO 2018103892	SEW EURODRIVE GMBH & CO	Vehicle, in particular logistics vehicle
WO 2018090034	ATMO AUTO POWER LLC	Method and system for rapid power exchange
WO 2018081622	INEVIT LLC	Fixation of a battery module in a battery module compartment of an energy storage system
WO 2018077571	BOSCH GMBH ROBERT	Method for supplying electrical energy to a vehicle, control device for carrying out a method, and vehicle column system

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LANZAMIENTO



Los ITPs** de la OEPM nos han ahorrado horas de revisión bibliográfica para definir el punto de partida de nuestros proyectos de I+D.



EJECUCIÓN



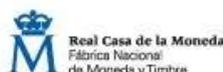
Los ITPs** de la OEPM detectaron solicitudes de patente relevantes cuando estábamos a mitad del proyecto y gracias a ello pudimos reconducir nuestra investigación.



CONCLUSIÓN



Gracias a los ITPs** de la OEPM hemos podido decidir la mejor forma de protección de nuestros resultados de I+D y redactar adecuadamente nuestras solicitudes de patente.



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