

### Noticias

Entre los días 1 y 3 de octubre de 2019 tuvo lugar en el pabellón N3P2 de la Feria de Valencia, La Feria Internacional de las Soluciones Medioambientales y las Energías ([EcoFira 2019](#)).

Los visitantes pudieron conocer las últimas novedades sobre vehículos eléctricos de las marcas RENAULT, MERCEDES BENZ o HYUNDAI, sobre patinetes, bicicletas y motos eléctricas, así como sobre puntos de recarga para vehículos.

En dicha Feria estuvo presente la [Oficina Española de Patentes y Marcas \(OEPM\)](#) con un stand, y participó en el ciclo de conferencias con una ponencia sobre Propiedad Industrial, el día 3 de octubre.

La red de talleres [First Stop](#) ha firmado un acuerdo con Cargacoche (empresa especializada en movilidad eléctrica que

ofrece soluciones para la recarga del vehículo eléctrico) para la instalación de puntos de recarga rápida, con una potencia de 50 kW, que tardan menos de 30 minutos en cargar el vehículo. Son de acceso público y estarán disponibles las 24 horas los 7 días de la semana.

First Stop presume de ser "la única red de talleres que ya cuenta con un mapa eléctrico de 100 puntos de recarga de hasta 22 kW de potencia en las principales provincias españolas" (cargadores semi-rápidos).

La empresa ofrece, además, un servicio pionero en Europa de recargas eléctricas fuera del taller, a través de una furgoneta eléctrica; invención que ha sido protegida ante la Oficina Española de Patentes y Marcas por medio de un modelo de utilidad.

### [BOLETINES OEPM](#)

NIPO: 116-19-009-9

## CONTENIDO:

- **TECNOLOGÍAS VEHICULARES**
  - [Baterías](#)
  - [Supercondensadores](#)
  - [Sistemas de recuperación de energía, p.ej. frenos regenerativos](#)
  - [Máquinas eléctricas](#)
  - [Convertidores, inversores](#)
  
- **INFRAESTRUCTURAS DE CARGA**
  - [Recarga de baterías](#)
  - [Cambio de baterías](#)

## 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
<a href="#">WO 2019234860 A1</a>	HITACHI CHEMICAL CO LTD	Lead storage battery
<a href="#">WO 2019240245 A1</a>	HONDA MOTOR CO LTD	Display device and display method
<a href="#">WO 2019239822 A1</a>	DENSO CORP	Battery cooler
<a href="#">WO 2019235733 A1</a>	SAMSUNG SDI CO LTD	Positive electrode active material, preparing method therefor, and lithium secondary battery including same
<a href="#">WO 2019232642 A1</a>	DANA CANADA CORP	Utilization of dead channel to improve temperature uniformity on thermal interface material
<a href="#">WO 2019235844 A1</a>	LG CHEMICAL LTD	Chamber and system for real-time analysis of gas generated inside secondary battery
<a href="#">WO 2019241642 A1</a>	GEORGIA TECH RES INST	Solid electrolyte materials and methods of making the same
<a href="#">WO 2019244381 A1</a>	PANASONIC IP MAN CO LTD	Battery
<a href="#">WO 2019246474 A1</a>	NANOTEK INSTRUMENTS INC	Lithium metal secondary battery featuring an anode-protecting layer
<a href="#">WO 2019246068 A1</a>	NANOTEK INSTRUMENTS INC	Alkali metal-sulfur secondary battery containing a conductive electrode-protecting layer
<a href="#">WO 2019235757 A1</a>	LG CHEMICAL LTD	Apparatus for real-time analysis of gas generated inside secondary battery
<a href="#">WO 2019235714 A1</a>	LG CHEMICAL LTD	Cylindrical secondary battery including adhesive portion including gas generating material
<a href="#">WO 2019244956 A1</a>	GS YUASA INT LTD	Positive electrode active material for nonaqueous electrolyte secondary battery, positive electrode for nonaqueous electrolyte secondary battery, nonaqueous electrolyte secondary battery, method of manufacturing nonaqueous electrolyte secondary battery, and method of use of nonaqueous electrolyte secondary battery
<a href="#">WO 2019244955 A1</a>	GS YUASA INT LTD	Positive electrode active material for non-aqueous electrolyte secondary battery, method for producing positive electrode active material for non-aqueous electrolyte secondary battery, positive electrode for non-aqueous electrolyte secondary battery, non-aqueous electrolyte secondary battery, method for producing non-aqueous electrolyte secondary battery, and method for use of non-aqueous electrolyte secondary battery
<a href="#">WO 2020005868 A1</a>	NANOTEK INSTRUMENTS INC	Lithium-selenium battery containing an electrode-protecting layer and method of improving cycle-life
<a href="#">WO 2019236371 A2</a>	NANOTEK INSTRUMENTS INC	Fire-resistant lithium battery containing an electrode-protecting layer
<a href="#">WO 2019240225 A1</a>	GS YUASA INT LTD	Estimation device, power storage device, estimation method, and computer program
<a href="#">WO 2019239949 A1</a>	MITSUBISHI GAS CHEMICAL CO	Lgms-based solid electrolyte and production method
<a href="#">WO 2019240244 A1</a>	HONDA MOTOR CO LTD	Display device and display method
<a href="#">WO 2019194893 A1</a>	GOOGLE LLC	Single fold battery design
<a href="#">WO 2019229376 A2</a>	ARKEMA FRANCE	Process for purifying lithium bis(fluorosulfonyl)imide salt
<a href="#">WO 2019230075 A1</a>	KUREHA CORP	Resin composition for nonaqueous electrolyte secondary battery, separator for nonaqueous electrolyte secondary battery using same, resin composition for electrode mixture layer, electrode for nonaqueous electrolyte secondary battery, and nonaqueous electrolyte secondary battery
<a href="#">WO 2019230592 A1</a>	FUJIFILM CORP	Current collector having easily adhering layer, electrode, all-solid-state secondary battery, electronic device, electric vehicle, and methods for manufacturing current collector having easily adhering layer, electrode and all-solid-state secondary battery
<a href="#">WO 2019230286 A1</a>	DAIMLER AG	Electrically driven vehicle
<a href="#">WO 2019235885 A1</a>	LG CHEMICAL LTD	Cathode active material for secondary battery, manufacturing method therefor, and lithium secondary battery comprising same

Oficina Española de Patentes y Marcas  
Unidad de Información Tecnológica

<a href="#">WO 2019241869 A1</a>	TESLA MOTORS CANADA ULC	Dioxazolones and nitrile sulfites as electrolyte additives for lithium-ion batteries
<a href="#">WO 2019230157 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Temperature raising device for secondary battery, computer program, and method for raising temperature of secondary battery
<a href="#">WO 2019230912 A1</a>	NISSAN MOTOR	Method for manufacturing lithium ion cell
<a href="#">WO 2019230129 A1</a>	HONDA MOTOR CO LTD	Charge control device, transport device, and program
<a href="#">WO 2019230077 A1</a>	PANASONIC IP MAN CO LTD	Secondary battery
<a href="#">WO 2019232050 A1</a>	HUNT ENERGY ENTPR LLC	Road based electrical storage batteries
<a href="#">WO 2019235469 A1</a>	NEC CORP	Reduced graphene-based material
<a href="#">WO 2019243729 A1</a>	COMMISSARIAT ENERGIE ATOMIQUE	Method for producing a lithium-containing metal oxide that can be used as an active material for a positive electrode
<a href="#">WO 2019197436 A1</a>	CONSTELLIUM SINGEN GMBH	Thermal management device for battery
<a href="#">WO 2019211353 A1</a>	SOLVAY	Non-aqueous liquid electrolyte composition
<a href="#">WO 2019231071 A1</a>	LG CHEMICAL LTD	Cylindrical secondary battery for preventing overcharging
<a href="#">WO 2019230536 A1</a>	NISSAN MOTOR	Battery device
<a href="#">WO 2019236904 A1</a>	QUANTUMSCAPE CORP	Solid-state battery
<a href="#">WO 2019235476 A1</a>	GS YUASA INT LTD	Power storage element
<a href="#">WO 2019195119 A1</a>	CPS TECH HOLDINGS LLC	Thermal management system for a battery module
<a href="#">WO 2019230533 A1</a>	MURATA MANUFACTURING CO	Electrolyte for lithium-ion secondary cell, and lithium-ion secondary cell
<a href="#">WO 2019228827 A1</a>	BOSCH GMBH ROBERT	Battery including bipolar cells that have a cell edge seal
<a href="#">WO 2019230033 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Parameter estimation device, parameter estimation method, and computer program
<a href="#">WO 2019230325 A1</a>	HONDA MOTOR CO LTD	Battery pack
<a href="#">WO 2019233668 A1</a>	MAHLE INT GMBH	Storage battery arrangement and method for producing a storage battery arrangement
<a href="#">WO 2019241065 A1</a>	NANOTEK INSTRUMENTS INC	Fast-chargeable lithium battery
<a href="#">WO 2019243022 A1</a>	BAYERISCHE MOTOREN WERKE AG	Vehicle with a high-voltage accumulator
<a href="#">WO 2019197340 A1</a>	SOGEFI AIR & COOLING	Battery unit comprising built-in temperature control means
<a href="#">WO 2019197592 A1</a>	VOLKSWAGEN AG	Method for determining an ageing condition of a battery, computer program, memory means, control device and vehicle
<a href="#">WO 2019202086 A1</a>	KARLSRUHER INST TECHNOLOGIE	An electrolyte composition for a lithium-ion battery and a lithium-ion battery
<a href="#">WO 2019230158 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Temperature raising device for secondary battery, computer program, and method for raising temperature of secondary battery
<a href="#">WO 2019228825 A1</a>	BOSCH GMBH ROBERT	Battery including bipolar cells that have a substrate with locating surface features
<a href="#">WO 2019230219 A1</a>	KUREHA CORP	Adhesive composition, separator structure, electrode structure, non-aqueous electrolyte secondary battery, and manufacturing method therefor
<a href="#">WO 2019234299 A1</a>	PROVENTIA OY	Arrangement for testing vehicle components and a method for setting up an arrangement for testing
<a href="#">WO 2019235052 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Secondary-battery temperature increasing device, computer program, and secondary-battery temperature increasing method
<a href="#">WO 2019192977 A1</a>	NIDEC GPM GMBH	Temperature equalisation device and device arrangement in a temperature equalisation system
<a href="#">WO 2019195644 A1</a>	THE FLORIDA STATE UNIV RESEARCH FOUNDATION INC	Solid electrolytes and methods
<a href="#">WO 2019197759 A1</a>	VALEO SYSTEMES THERMIQUES	System for cooling at least one motor vehicle battery
<a href="#">WO 2019197535 A1</a>	LION SMART GMBH	Battery device, protective device and method for producing a battery device
<a href="#">WO 2019212333 A1</a>	R U ENG & DETACHERING B V	Battery exchange system and method
<a href="#">WO 2019230464 A1</a>	PANASONIC IP MAN CO LTD	Charging method for nonaqueous electrolyte secondary cell and charging system for nonaqueous electrolyte secondary cell
<a href="#">WO 2019230908 A1</a>	MURATA MANUFACTURING CO	Nonaqueous electrolyte secondary battery

<a href="#">WO 2019230069 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Battery management device, battery information processing system, and battery information processing method
<a href="#">WO 2019230506 A1</a>	UBE INDUSTRIES	Non-aqueous electrolyte for power storage device, and power storage device
<a href="#">WO 2019233956 A1</a>	OUTOKUMPU OY	Thermal systems for battery electric vehicles
<a href="#">WO 2019194290 A1</a>	AIST	Composite oxide and electrochemical device using the same as electrolyte material
<a href="#">WO 2019203549 A1</a>	IUCF HYU ERICA CAMPUS	Solid electrolyte, method for preparing same, and self-generating secondary battery including same
<a href="#">WO 2019216713 A1</a>	LG CHEMICAL LTD	Lithium metal secondary battery with improved safety, and battery module including same
<a href="#">WO 2019215089 A1</a>	KUKA IND GMBH & CO KG	Battery cell preparation technique
<a href="#">WO 2019221394 A1</a>	SAMSUNG SDI CO LTD	Battery pack
<a href="#">WO 2019226200 A2</a>	UNIV NORTHWESTERN	High energy-density cathode materials for secondary lithium ion batteries
<a href="#">WO 2019241745 A1</a>	QUANTUMSCAPE CORP	All sulfide electrochemical cell
<a href="#">WO 2019238342 A1</a>	BAYERISCHE MOTOREN WERKE AG	Line installation device for a high-voltage battery of a motor vehicle, line arrangement, high-voltage battery and motor vehicle
<a href="#">WO 2019194445 A1</a>	LG CHEMICAL LTD	Electrode for lithium secondary battery and lithium secondary battery comprising same
<a href="#">WO 2019198146 A1</a>	TOSHIBA KK	Electrode group, non-aqueous electrolyte battery, and battery pack
<a href="#">WO 2019203571 A1</a>	LG CHEMICAL LTD	Asymmetrically structured flame-retardant separator for secondary battery
<a href="#">WO 2019206409 A1</a>	AKASOL GMBH	Battery unit, battery module, and battery system
<a href="#">WO 2019221497 A1</a>	LG CHEMICAL LTD	Cathode active material for secondary battery, manufacturing method therefor, and lithium secondary battery comprising same
<a href="#">WO 2019221395 A1</a>	SAMSUNG SDI CO LTD	Battery pack
<a href="#">WO 2019238361 A1</a>	BAYERISCHE MOTOREN WERKE AG	Device for operating an electrical energy store of an electrically operable motor vehicle
<a href="#">WO 2019194510 A1</a>	LG CHEMICAL LTD	Cathode active material for lithium secondary battery, method for manufacturing same, cathode comprising same for lithium secondary battery, and lithium secondary battery
<a href="#">WO 2019194554 A1</a>	LG CHEMICAL LTD	Negative electrode active material for lithium secondary battery, manufacturing method therefor, lithium secondary battery negative electrode comprising same, and lithium secondary battery
<a href="#">WO 2019203431 A1</a>	LG CHEMICAL LTD	Resin composition and battery module comprising same
<a href="#">WO 2019202284 A1</a>	ARKEMA FRANCE	Lithium/sulfur battery with increased capacity and associated production process
<a href="#">WO 2019203047 A1</a>	MURATA MANUFACTURING CO	Secondary cell
<a href="#">WO 2019216694 A1</a>	LG CHEMICAL LTD	Cathode active material for lithium secondary battery, production method therefor, cathode comprising same for lithium secondary battery, and lithium secondary battery comprising same
<a href="#">WO 2019216211 A1</a>	HITACHI CHEMICAL CO LTD	Lead acid storage battery
<a href="#">WO 2019216216 A1</a>	SEKISUI CHEMICAL CO LTD	Collector layer for all-solid-state batteries, all-solid-state battery and carbon material
<a href="#">WO 2019221450 A1</a>	LG CHEMICAL LTD	Anode, and lithium secondary battery comprising anode
<a href="#">WO 2019221410 A1</a>	LG CHEMICAL LTD	Negative electrode including electrode protective layer, and lithium secondary battery employing same
<a href="#">WO 2019221396 A1</a>	SAMSUNG SDI CO LTD	Battery pack
<a href="#">WO 2019225846 A1</a>	LG CHEMICAL LTD	Cooling member for battery module, and battery pack comprising same
<a href="#">WO 2019224199 A1</a>	SGL CARBON SE	Stored energy source protected by a composite material
<a href="#">WO 2019198716 A1</a>	NISSAN MOTOR	Nonaqueous electrolyte secondary battery
<a href="#">WO 2019208726 A1</a>	DENSO CORP	Cooling device
<a href="#">WO 2019217651 A1</a>	NANOTEK INSTRUMENTS INC	Alkali metal-selenium secondary battery containing a graphene-based separator layer
<a href="#">WO 2019216709 A1</a>	PARK YONG JIN	Power supply apparatus
<a href="#">WO 2019225884 A1</a>	LG CHEMICAL LTD	Separator for lithium-sulfur battery and lithium-sulfur battery including same
<a href="#">WO 2019226020 A1</a>	LG CHEMICAL LTD	Composite particles for anode active material and anode for all-solid-state battery comprising same
<a href="#">WO 2019226674 A1</a>	UNIV UTAH RES FOUND	Composite solid electrolyte including lithium iron phosphate

Oficina Española de Patentes y Marcas  
Unidad de Información Tecnológica



<a href="#">WO 2019241291 A1</a>	UNIV RICE WILLIAM M	Systems and methods of detecting li dendrites
<a href="#">WO 2019186057 A1</a>	VALEO SYSTEMES THERMIQUES	Circuit for thermal management of an electrical storage device for a motor vehicle and associated control method
<a href="#">WO 2019190995 A1</a>	RIVIAN IP HOLDINGS LLC	Shear wall with integrated conductors
<a href="#">WO 2019193471 A1</a>	SEMICONDUCTOR ENERGY LAB	Method for estimating state of charge of power storage device and system for estimating state of charge of power storage device
<a href="#">WO 2019194613 A1</a>	LG CHEMICAL LTD	Cathode active material, method for preparing cathode active material, cathode including cathode active material, and secondary battery including cathode
<a href="#">WO 2019195553 A1</a>	CELGARD LLC	Solid state batteries, sse batteries, lithium metal batteries with solid state electrolytes, hsse, separators, and/or coatings, and/or related methods
<a href="#">WO 2019215817 A1</a>	HONDA MOTOR CO LTD	Storage battery system
<a href="#">WO 2019220915 A1</a>	HONDA MOTOR CO LTD	Power supply system
<a href="#">WO 2019221456 A1</a>	LG CHEMICAL LTD	Electrolyte and lithium secondary battery comprising same
<a href="#">WO 2019224020 A1</a>	MUBEA CARBO TECH GMBH	Battery case
<a href="#">WO 2019231277 A1</a>	LG CHEMICAL LTD	Method for manufacturing lithium secondary battery
<a href="#">WO 2019187554 A1</a>	TOYOTA JIDOSHOKKI KK	Battery module
<a href="#">WO 2019187313 A1</a>	SANYO ELECTRIC CO	Power supply device, electric vehicle provided with said power supply device, and electricity-storage device
<a href="#">WO 2019194196 A1</a>	HITACHI CHEMICAL CO LTD	Electrode for secondary battery, electrolyte layer for secondary battery and secondary battery
<a href="#">WO 2019193691 A1</a>	TOSHIBA KK	Positive electrode, electrode group and nonaqueous electrolyte battery
<a href="#">WO 2019193692 A1</a>	TOSHIBA KK	Active material, electrode, non-aqueous electrolyte cell, and cell pack
<a href="#">WO 2019194609 A1</a>	LG CHEMICAL LTD	Method for manufacturing cathode active material for lithium secondary battery, cathode active material for lithium secondary battery, cathode, comprising same, for lithium secondary battery, and lithium secondary battery comprising same
<a href="#">WO 2019194429 A1</a>	LG CHEMICAL LTD	Positive electrode for lithium secondary battery comprising goethite, and lithium secondary battery comprising same
<a href="#">WO 2019198454 A1</a>	NISSAN MOTOR	Battery manufacturing method
<a href="#">WO 2019198952 A1</a>	SAMSUNG SDI CO LTD	Coolant distributor
<a href="#">WO 2019207616 A1</a>	MURATA MANUFACTURING CO	Lithium ion secondary battery
<a href="#">WO 2019208346 A1</a>	FUJIFILM CORP	Solid electrolyte-including sheet, electrode sheet for fully solid-state secondary battery, fully solid-state secondary battery, electronic device, electric vehicle, and manufacturing methods for these
<a href="#">WO 2019208959 A1</a>	LG CHEMICAL LTD	Solid electrolyte battery and battery module and battery pack comprising same
<a href="#">WO 2019209087 A1</a>	LG CHEMICAL LTD	Separator for lithium secondary battery and lithium secondary battery comprising same
<a href="#">WO 2019209089 A1</a>	LG CHEMICAL LTD	Lithium secondary battery and manufacturing method therefor
<a href="#">WO 2019212314 A1</a>	LG CHEMICAL LTD	Method for manufacturing all-solid-state battery comprising polymer-based solid electrolyte and all-solid-state battery manufactured by same method
<a href="#">WO 2019212007 A1</a>	NGK SPARK PLUG CO	Ionic conductor and electricity storage device
<a href="#">WO 2019212128 A1</a>	LG CHEMICAL LTD	Battery management device, battery management method and energy storage system comprising battery management device
<a href="#">WO 2019220982 A1</a>	MURATA MANUFACTURING CO	Secondary cell
<a href="#">WO 2019221859 A1</a>	VISSERS BATTERY CORP	Methods, devices and systems to isolate solid products in molten fluid electrode apparatus
<a href="#">WO 2019221857 A1</a>	VISSERS BATTERY CORP	Molten fluid apparatus with solid non-brittle electrolyte
<a href="#">WO 2019188693 A1</a>	HITACHI CHEMICAL CO LTD	Electrolyte sheet and secondary battery
<a href="#">WO 2019188207 A1</a>	DAIKIN IND LTD	Electrolyte solution, electrochemical device, lithium ion secondary battery, module and compound
<a href="#">WO 2019184863 A1</a>	BYD CO LTD	Recycling system and method for power batteries in electric vehicles
<a href="#">WO 2019189341 A1</a>	GS YUASA INT LTD	Electricity storage element
<a href="#">WO 2019187307 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Battery monitoring method, battery monitoring device, and battery monitoring system
<a href="#">WO 2019187940 A1</a>	HONDA MOTOR CO LTD	Solid-state battery and solid-state battery module

<a href="#">WO 2019189821 A1</a>	FUJIFILM CORP	Solid electrolyte sheet and method for producing negative electrode sheet for all-solid-state secondary battery and all-solid-state secondary battery
<a href="#">WO 2019192282 A1</a>	NINGBO GEELY AUTOMOBILE RES & DEVELOPMENT CO LTD	A vehicle thermal management system
<a href="#">WO 2019198530 A1</a>	NISSAN CHEMICAL CORP	Lithium ion secondary battery
<a href="#">WO 2019199057 A1</a>	LG CHEMICAL LTD	Battery diagnostic device and method
<a href="#">WO 2019196496 A1</a>	DAR YUN ENERGY SCIENCE TECH CO LTD	Charging method for battery charging stabilizing and power supply duration extending of electric vehicle
<a href="#">WO 2019204548 A1</a>	DARAMIC LLC	Acid batteries with a fibrous mat
<a href="#">WO 2019207924 A1</a>	PANASONIC IP MAN CO LTD	Nonaqueous electrolyte secondary battery
<a href="#">WO 2019209066 A1</a>	SAMSUNG SDI CO LTD	Rechargeable battery and apparatus and method for manufacturing same
<a href="#">WO 2019208928 A1</a>	SAMSUNG SDI CO LTD	Secondary lithium battery anode and secondary lithium battery including same
<a href="#">WO 2019208958 A1</a>	LG CHEMICAL LTD	Cathode for solid electrolyte battery and solid electrolyte battery comprising same
<a href="#">WO 2019212148 A1</a>	LG CHEMICAL LTD	Device and method for testing secondary battery
<a href="#">WO 2019212321 A1</a>	LG CHEMICAL LTD	Method for cleaning positive electrode active material, positive electrode active material manufacturing method comprising same, and positive electrode active material manufactured by same
<a href="#">WO 2019216532 A1</a>	LG CHEMICAL LTD	Battery control device and energy storage system comprising same
<a href="#">WO 2019217201 A1</a>	CADENZA INNOVATION INC	Lithium ion battery
<a href="#">WO 2019220570 A1</a>	HITACHI CHEMICAL CO LTD	Active material holding member, electrode, and lead storage cell
<a href="#">WO 2019227221 A1</a>	DANA CANADA CORP	Thermal management systems and heat exchangers for battery thermal modulation
<a href="#">WO 2019187131 A1</a>	TOSHIBA KK	Electrode group, battery, and battery pack
<a href="#">WO 2019187680 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Secondary battery control device
<a href="#">WO 2019189146 A1</a>	ADEKA CORP	Lithium ion secondary battery and method of operating same
<a href="#">WO 2019194227 A1</a>	SANYO ELECTRIC CO	Cell
<a href="#">WO 2019194205 A1</a>	3DOM INC	Secondary battery diagnosing device and diagnosing method
<a href="#">WO 2019194238 A1</a>	SANYO ELECTRIC CO	Battery
<a href="#">WO 2019194288 A1</a>	TOYOTA JIDOSHOKKI KK	Power storage module
<a href="#">WO 2019194027 A1</a>	DENSO CORP	Battery cooling device
<a href="#">WO 2019193884 A1</a>	HITACHI LTD	Energy storage system
<a href="#">WO 2019193756 A1</a>	TOSHIBA KK	Nonaqueous electrolyte battery and battery pack
<a href="#">WO 2019193972 A1</a>	TOYOTA JIDOSHOKKI KK	Alkali storage battery and method for manufacturing same
<a href="#">WO 2019191837 A1</a>	SPRINGPOWER INT INC	Method to produce cathode materials for li-ion batteries
<a href="#">WO 2019198949 A1</a>	LG CHEMICAL LTD	Method of producing iron phosphide, positive electrode for lithium secondary battery comprising iron phosphide, and lithium secondary battery comprising same
<a href="#">WO 2019198495 A1</a>	NISSAN MOTOR	Battery production method
<a href="#">WO 2019208347 A1</a>	FUJIFILM CORP	Solid electrolyte-including sheet, electrode sheet for fully solid-state secondary battery, fully solid-state secondary battery, electronic device, electric vehicle, and manufacturing methods for these
<a href="#">WO 2019212162 A1</a>	LG CHEMICAL LTD	Binder for lithium-sulfur secondary battery and lithium-sulfur secondary battery including same
<a href="#">WO 2019220981 A1</a>	MURATA MANUFACTURING CO	Solid battery, battery module, and method for charging solid battery
<a href="#">WO 2019220804 A1</a>	SANYO ELECTRIC CO	Management device and power storage system
<a href="#">WO 2019221584 A2</a>	UNIV YONSEI IACF	Layered ge, manufacturing method therefor, ge nanosheet peeled therefrom, and electrode comprising same for lithium ion battery
<a href="#">WO 2019188360 A1</a>	TDK CORP	Secondary battery electrolyte and secondary battery
<a href="#">WO 2019188626 A1</a>	IBIDEN CO LTD	Battery pack heat-absorbing sheet and battery pack
<a href="#">WO 2019188056 A1</a>	GS YUASA INT LTD	Lead acid storage battery
<a href="#">WO 2019186851 A1</a>	TOSHIBA KK	Secondary battery, battery module, vehicle and flying object
<a href="#">WO 2019188816 A1</a>	KYOCERA CORP	Control device, information processing device, and storage battery retrieval system

<a href="#">WO 2019189413 A1</a>	MITSUBISHI CHEM CORP	Nonaqueous electrolyte solution and energy device using same
<a href="#">WO 2019189850 A1</a>	MITSUBISHI CHEM CORP	Partition member and assembled battery
<a href="#">WO 2019198531 A1</a>	NISSAN CHEMICAL CORP	Additive for nonaqueous electrolyte solutions, nonaqueous electrolyte solution, and lithium ion secondary battery
<a href="#">WO 2019199124 A1</a>	SAMYANG CORP	Electrolyte composition for lithium secondary battery and lithium secondary battery comprising same
<a href="#">WO 2019204659 A1</a>	A123 SYSTEMS LLC	Method and systems for coated cathode materials and use of coated cathode materials
<a href="#">WO 2019208185 A1</a>	AUTONETWORKS TECHNOLOGIES LTD	Power storage unit
<a href="#">WO 2019212026 A1</a>	NGK SPARK PLUG CO	Ion conductive powder, ion conductive molded article, and electricity storage device
<a href="#">WO 2019216658 A1</a>	LG CHEMICAL LTD	Composition for anode active material coating, anode active material, and anode comprising same for lithium secondary battery
<a href="#">WO 2019221376 A1</a>	SAMSUNG SDI CO LTD	Battery pack comprising frame profile having integral refrigerant circuit member
<a href="#">WO 2019221237 A1</a>	DENSO CORP	Apparatus temperature adjustment device
<a href="#">WO 2019220560 A1</a>	HONDA MOTOR CO LTD	Power consumption control device
<a href="#">WO 2019225879 A1</a>	LG CHEMICAL LTD	Negative electrode active material for lithium secondary battery and method for preparing same
<a href="#">WO 2019225969 A1</a>	LG CHEMICAL LTD	Positive electrode material for lithium rechargeable battery, positive electrode for lithium rechargeable battery, comprising same, and lithium rechargeable battery
<a href="#">WO 2019187939 A1</a>	HONDA MOTOR CO LTD	Solid-state battery module
<a href="#">WO 2019188731 A1</a>	ENVISION AESC JAPAN LTD	Power supply device
<a href="#">WO 2019190072 A1</a>	LG CHEMICAL LTD	Easier to assemble battery module including bus bar frame
<a href="#">WO 2019193690 A1</a>	TOSHIBA KK	Non-aqueous electrolyte cell, and cell pack
<a href="#">WO 2019199062 A1</a>	LG CHEMICAL LTD	Device, method, battery pack and electrical system for deciding electrode information of battery
<a href="#">WO 2019199064 A1</a>	LG CHEMICAL LTD	Battery diagnosis device and method
<a href="#">WO 2019198453 A1</a>	NISSAN MOTOR	Battery manufacturing method
<a href="#">WO 2019207399 A1</a>	SEMICONDUCTOR ENERGY LAB	Accumulator state-of-charge estimation method and accumulator state-of-charge estimation system
<a href="#">WO 2019208110 A1</a>	HITACHI CHEMICAL CO LTD	Electrolyte slurry composition, electrolyte sheet production method, and secondary battery production method
<a href="#">WO 2019208791 A1</a>	MURATA MANUFACTURING CO	Battery, battery pack, electronic device, electric vehicle, and electricity storage system
<a href="#">WO 2019208938 A1</a>	LG CHEMICAL LTD	Battery module and battery pack comprising same
<a href="#">WO 2019212161 A1</a>	LG CHEMICAL LTD	Cathode active material for lithium-sulfur battery and manufacturing method therefor
<a href="#">WO 2019218316 A1</a>	SHENZHEN VOLTATECH TECH CO LTD	Storage battery maintainer and method, and electronic device
<a href="#">WO 2019220805 A1</a>	SANYO ELECTRIC CO	Management device and power storage system
<a href="#">WO 2019221042 A1</a>	NGK SPARK PLUG CO	Ionic conductor and lithium battery
<a href="#">WO 2019221856 A1</a>	VISSERS BATTERY CORP	Molten fluid electrode apparatus
<a href="#">WO 2019225643 A1</a>	IBIDEN CO LTD	Heat transfer suppression sheet for battery pack, and battery pack
<a href="#">WO 2019238337 A1</a>	BAYERISCHE MOTOREN WERKE AG	Method for impedance-controlled fast charging, control unit for a charging system, stored energy source, and working device
<a href="#">WO 2019189866 A1</a>	MITSUI CHEMICALS INC	Positive electrode equipped with undercoat layer containing microcapsules, and lithium-ion secondary battery
<a href="#">WO 2019187315 A1</a>	SANYO ELECTRIC CO	Power supply device and electric vehicle provided with power supply device
<a href="#">WO 2019184844 A1</a>	BYD CO LTD	Method for calculating state of power sop of power battery pack, device and electric vehicle
<a href="#">WO 2019198961 A1</a>	LG CHEMICAL LTD	Lithium secondary battery and manufacturing method therefor
<a href="#">WO 2019199058 A1</a>	LG CHEMICAL LTD	Apparatus and method for diagnosing battery
<a href="#">WO 2019208153 A1</a>	ADEKA CORP	Nonaqueous electrolyte secondary battery
<a href="#">WO 2019208922 A1</a>	LG CHEMICAL LTD	Battery module, battery pack including same battery module, and vehicle including same battery pack
<a href="#">WO 2019217442 A1</a>	CHARGEPOINT INC	Electric vehicle charging system
<a href="#">WO 2019213717 A1</a>	CAPE BOUVARD TECH PTY LTD	A structural battery
<a href="#">WO 2019197603 A2</a>	AUDI AG	Electric vehicle battery cell with sense tabs
<a href="#">WO 2019203969 A1</a>	EC POWER LLC	Systems and methods of battery charging assisted by heating



<a href="#">WO 2019219380 A1</a>	BOSCH GMBH ROBERT	Device for the electrochemical processing of components of a battery cell, method for operating same and use thereof
<a href="#">WO 2019200073 A1</a>	AXIUM IP LLC	Polymer-ceramic hybrid separator membranes, precursors, and manufacturing processes
<a href="#">WO 2019204964 A1</a>	GM GLOBAL TECH OPERATIONS LLC	Hybrid electrodes and electrochemical cells and modules utilizing the same
<a href="#">WO 2019221861 A1</a>	VISSERS BATTERY CORP	Devices, systems, and methods for molten fluid electrode apparatus management
<a href="#">WO 2019184864 A1</a>	BYD CO LTD	Electric vehicle, and system and method for giving prompt according to usage habits of user thereof

[...volver a CONTENIDO](#)

## SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2019243950 A1</a>	SEMICONDUCTOR ENERGY LAB	Method for detecting abnormality in power storage device and device for controlling power storage device
<a href="#">WO 2019229555 A1</a>	TORINO POLITECNICO	High power and high energy self-switching electrochemical storage device
<a href="#">WO 2019229366 A1</a>	ARKEMA FRANCE	Composition of bis(fluorosulfonyl)imide lithium salt
<a href="#">WO 2019220829 A1</a>	DAIKIN IND LTD	Electrolytic solution, electrochemical device, lithium-ion secondary battery, and module
<a href="#">WO 2019221075 A1</a>	NIPPON CHEMICON	Electrode, method for producing said electrode, and electricity storage device provided with said electrode
<a href="#">WO 2019231228 A1</a>	LG CHEMICAL LTD	Latch relay capable of real-time state control, state control method for latch relay, and battery pack comprising latch relay capable of real-time state control
<a href="#">WO 2019208246 A1</a>	DAIKIN IND LTD	Electrolytic solution, electrochemical device, lithium ion secondary battery, and module
<a href="#">WO 2019220764 A1</a>	DAIKIN IND LTD	Electrolyte, electrochemical device, lithium-ion secondary battery, and module
<a href="#">WO 2019225717 A1</a>	UBE INDUSTRIES	Electrode binder resin composition, electrode mix paste, and electrode
<a href="#">WO 2019207983 A1</a>	DAIKIN IND LTD	Electrolytic solution, electrochemical device, lithium-ion secondary battery, and module

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## SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2019221554 A1</a>	MANDO CORP	Brake system
<a href="#">WO 2019188544 A1</a>	ISUZU MOTORS LTD	Regenerative control device
<a href="#">WO 2019213655 A1</a>	NIMBUS ENG INC	Regenerative braking using phosphorescence

[...volver a CONTENIDO](#)

## MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2019241765 A1</a>	INDIGO TECH INC	A sealed axial flux motor with integrated cooling
<a href="#">WO 2019245112 A1</a>	UNIV KEIMYUNG IACF	Rotor structure for detecting position of motor
<a href="#">WO 2019233596 A1</a>	PIERBURG PUMP TECHNOLOGY GMBH	Electric motor
<a href="#">WO 2019197323 A1</a>	CPT GROUP GMBH	Apparatus for straightening wire ends
<a href="#">WO 2019197668 A1</a>	MMT AG	Linear compact electric actuator having a resilient kinematic chain
<a href="#">WO 2019201736 A1</a>	RENAULT SAS	Stator assembly for electric machine
<a href="#">WO 2019224721 A1</a>	PROTEAN ELECTRIC LTD	A method of assembling an electric motor or generator
<a href="#">WO 2019227932 A1</a>	HUAWEI TECH CO LTD	Motor rotor device and motor
<a href="#">WO 2019207448 A1</a>	TECNOMATIC SPA	Apparatus and method for pre-assembling winding sets of a winding bar for electric machine stator or rotor
<a href="#">WO 2019215514 A1</a>	TECNOMATIC SPA	Assembly and method of assemblage for a winding group of a bar winding for an electric machine
<a href="#">WO 2019225665 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Electric motor, stator, and electric motor manufacturing method
<a href="#">WO 2019212903 A1</a>	SCHAEFFLER TECHNOLOGIES AG	Hybrid module including stamped rotor carrier
<a href="#">WO 2019217288 A1</a>	GALATECH INC	Methods and systems for stator cooling
<a href="#">WO 2019197026 A1</a>	PIERBURG GMBH	Optimising e-motor geometry and e-motor housing geometry for an electrical air conditioning compressor in order to facilitate a reduction of the motor installation space
<a href="#">WO 2019204501 A1</a>	UNIV MICHIGAN REGENTS	Brushless, self-excited synchronous field-winding machine

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## CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2019244614 A1</a>	KEIHIN CORP	Electric power conversion device
<a href="#">WO 2019244680 A1</a>	TANAKA SHOUICHI	Electric vehicle power system
<a href="#">WO 2019244491 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Electric power converter
<a href="#">WO 2019244418 A1</a>	TANAKA SHOUICHI	Three-phase motor drive device
<a href="#">WO 2019243154 A1</a>	BOSCH GMBH ROBERT	Power electronic converter having sequentially cooled sub-units and temperature compensation by means of switching frequency adaptation
<a href="#">WO 2019230293 A1</a>	DAIMLER AG	Electric vehicle
<a href="#">WO 2019235144 A1</a>	DENSO CORP	Drive circuit
<a href="#">WO 2019236861 A1</a>	MAGNA INT INC	Scalable multi-level power converter
<a href="#">WO 2019195867 A1</a>	CERACAP ENGEL KG	Power inverter with intermediate circuit
<a href="#">WO 2019215128 A1</a>	BOSCH GMBH ROBERT	Inverter, electric powertrain, vehicle, and method for operating an inverter
<a href="#">WO 2019220763 A1</a>	mitsubishi electric corp	Power conversion device and power conversion system
<a href="#">WO 2019186078 A1</a>	INST VEDECOM	Four-arm npc converter for electric vehicles and two-way charger comprising such a converter
<a href="#">WO 2019198361 A1</a>	HITACHI LTD	Power conversion device
<a href="#">WO 2019211172 A1</a>	INNOFAS GMBH	High-speed discharge system for a high-voltage energy store
<a href="#">WO 2019202675 A1</a>	mitsubishi electric corp	Power conversion device
<a href="#">WO 2019203143 A1</a>	SANDEN AUTOMOTIVE COMPONENTS CORP	Power conversion device
<a href="#">WO 2019224029 A1</a>	BOSCH GMBH ROBERT	Electrical filter element and electrical power converter
<a href="#">WO 2019238203 A1</a>	VOLVO TRUCK CORP	Dc/dc converter overload management in vehicle electrical systems
<a href="#">WO 2019202354 A1</a>	NISSAN MOTOR	Method for controlling resonant power conversion device, and resonant power conversion device
<a href="#">WO 2019225509 A1</a>	SANDEN AUTOMOTIVE COMPONENTS CORP	Power source input circuit and inverter-integrated electric compressor for vehicle comprising said circuit
<a href="#">WO 2019189018 A1</a>	PANASONIC IP MAN CO LTD	Llc resonant converter
<a href="#">WO 2019199964 A1</a>	UNIV MARYLAND	Vehicle on-board charger for bi-directional charging of low/high voltage batteries
<a href="#">WO 2019206230 A1</a>	BYD CO LTD	Dcdc converter, vehicle-mounted charger and electric vehicle
<a href="#">WO 2019208318 A1</a>	PANASONIC IP MAN CO LTD	Power conversion device
<a href="#">WO 2019208250 A1</a>	PANASONIC IP MAN CO LTD	Power supply device
<a href="#">WO 2019215157 A1</a>	BOSCH GMBH ROBERT	Device for charging an energy store of an electric vehicle
<a href="#">WO 2019194971 A1</a>	WITRICITY CORP	Dc to ac power conversion using a wireless power receiver
<a href="#">WO 2019198160 A1</a>	NISSAN MOTOR	Boost converter control method and control device
<a href="#">WO 2019198830 A1</a>	NIDEC CORP	Inverter unit and motor unit
<a href="#">WO 2019206229 A1</a>	BYD CO LTD	Dcdc converter, vehicle-mounted charger and electric vehicle
<a href="#">WO 2019217051 A1</a>	BAE SYS CONTROLS INC	Vehicle exportable power
<a href="#">WO 2019225016 A1</a>	NISSAN MOTOR	Inverter control method and inverter control system
<a href="#">WO 2019193903 A1</a>	DENSO CORP	Power conversion device and capacitor module
<a href="#">WO 2019205722 A1</a>	CHONGQING JINKANG NEW ENERGY VEHICLE CO LTD	Electric vehicle inverter module capacitors
<a href="#">WO 2019187454 A1</a>	HITACHI LTD	Electric vehicle drive system, semiconductor current reducer, and failure detection method therefor
<a href="#">WO 2019203990 A1</a>	GEN ELECTRIC	Receiver unit of a wireless power transfer system
<a href="#">WO 2019208184 A1</a>	AUTONETWORKS TECHNOLOGIES LTD	Electric power converter
<a href="#">WO 2019206231 A1</a>	BYD CO LTD	Dcdc converter, vehicle-mounted charger and electric vehicle
<a href="#">WO 2019208008 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Power conversion device
<a href="#">WO 2019208064 A1</a>	NIDEC CORP	Inverter unit and motor unit
<a href="#">WO 2019212107 A1</a>	PAC TECH CO LTD	Llc resonant converter and method of operating same

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[...volver a CONTENIDO](#)

## RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2019241491 A1</a>	CUMMINS INC	Method and system for energy management of hybrid power systems
<a href="#">WO 2019244489 A1</a>	PANASONIC IP MAN CO LTD	Battery system
<a href="#">WO 2019230110 A1</a>	HITACHI LTD	Battery control device, battery control system, and battery control method
<a href="#">WO 2019230131 A1</a>	HONDA MOTOR CO LTD	Charge control device, transport device, and program
<a href="#">WO 2019201573 A1</a>	CPT GROUP GMBH	Method for heating a component of an electric motor vehicle, and motor vehicle
<a href="#">WO 2019233629 A1</a>	PORSCHE AG	Universal charging appliance for direct-current and alternating-current charging
<a href="#">WO 2019202272 A1</a>	GIRARDEAU CHRISTIAN	Automatic electrical charger for autonomous or semi-autonomous vehicle
<a href="#">WO 2019234988 A1</a>	HITACHI LTD	Charging device
<a href="#">WO 2019215142 A1</a>	BOSCH GMBH ROBERT	Apparatus and method for supplying power to one or more consumers
<a href="#">WO 2019215137 A1</a>	BOSCH GMBH ROBERT	Apparatus for providing a charging current for at least one battery and a method for operating same
<a href="#">WO 2019239263 A1</a>	TE CONNECTIVITY CORP	Electrical power terminal for a charging system
<a href="#">WO 2019239262 A1</a>	TE CONNECTIVITY CORP	Charging system with cooling tube
<a href="#">WO 2019238167 A1</a>	KIEKERT AG	Locking device for an electrical charging device of a motor vehicle
<a href="#">WO 2019215130 A1</a>	BOSCH GMBH ROBERT	Direct-voltage mains device and method for charging a battery, in particular a battery of an electric motor vehicle
<a href="#">WO 2019215134 A1</a>	BOSCH GMBH ROBERT	Multi-output rectifier and supply station for providing a multi-pole dc voltage network, in particular for an apparatus for charging a battery
<a href="#">WO 2019227213 A1</a>	GOVERNING COUNCIL UNIV TORONTO	Apparatus, methods, and systems for wireless power transfer
<a href="#">WO 2019210744 A1</a>	AIWAYS AUTOMOBILE SHANGHAI CO LTD	Method, system and apparatus for charging electric vehicle in parking lot, and storage medium
<a href="#">WO 2019210745 A1</a>	AIWAYS AUTOMOBILE SHANGHAI CO LTD	Replaceable battery pack electric vehicle charging method, system, device, and storage medium
<a href="#">WO 2019215140 A1</a>	BOSCH GMBH ROBERT	Device and method for charging an electrical energy store
<a href="#">WO 2019224681 A1</a>	SESHADRI SATHYANARAYANA MYSORE	System to charge electric vehicle batteries
<a href="#">WO 2019190588 A1</a>	THE NOCO COMPANY	Portable or hand held vehicle battery jump starting apparatus with battery cell equalization circuit

[...volver a CONTENIDO](#)

## CAMBIO DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2019210745 A1</a>	AIWAYS AUTOMOBILE SHANGHAI CO LTD	Replaceable battery pack electric vehicle charging method, system, device, and storage medium

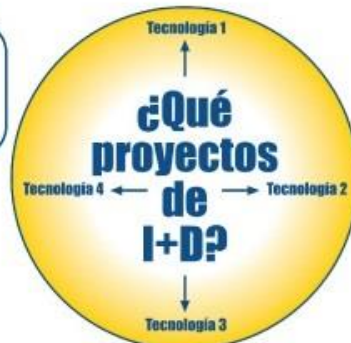
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