

### Noticias

Las [matriculaciones de vehículos híbridos y eléctricos](#) vuelven a crecer en el tercer trimestre de este año, según datos publicados por la Asociación Española de Fabricantes de Automóviles y Camiones (Anfac). Detrás de este aumento de las matriculaciones se encuentra el estímulo que ha supuesto el Plan MOVEA de ayudas a la compra de vehículos eficientes.

La UE prevé que [la transición hacia el coche eléctrico](#) se lleve a cabo antes de lo previsto por los analistas, según ha declarado comisaria de Mercado Interior e Industria, Elzbieta Bienkowska, durante la presentación de la nueva estrategia de política industrial del bloque comunitario. Para incentivar esta transición rápida hacia modelos de bajas emisiones, Bruselas presentará en otoño un segundo paquete legislativo sobre movilidad que incluirá niveles de emisiones de CO2 para coches y furgonetas.

El [Salón del Automóvil de Fráncfort](#), celebrado el pasado mes de septiembre, ha estado copado por el protagonismo que han cobrado en esta edición los coches eléctricos. Los principales fabricantes a

nivel internacional, especialmente los alemanes, han mostrado sus principales novedades en esta línea, incluyendo el primer concept car de Mercedes totalmente eléctrico para el segmento compacto.

Entre el 24 y el 27 de octubre, IFEMA organizará [Trafic 2017](#), la feria de la movilidad segura y sostenible, que incluye como novedad en esta edición un Área de Movilidad Eléctrica y Eficiente, y donde se exhibirán hasta 14 modelos de vehículos menos contaminantes o cero emisiones.

La [Junta de Andalucía](#) destinará 20 millones de euros para el impulso del coche eléctrico, a través de la Agencia de la Energía. El plan incluye la instalación de hasta 400 puntos de recarga o la adquisición por parte de las administraciones públicas de hasta 2000 nuevos automóviles,

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

[BOLETINES OEPM](#)

NIPO: 088-17-022-5

## 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 2017135996</a>	JOHNSON CONTROLS TECH CO	Battery temperature and charge adjustment system and method
<a href="#">WO 2017143761</a>	NINGDE AMPEREX TECHNOLOGY LTD	Method for recharging rechargeable battery
<a href="#">WO 2017154999</a>	NISSAN MOTOR	Battery pack
<a href="#">WO 2017159167</a>	IHI CORP	Coil apparatus
<a href="#">WO 2017151813</a>	FARADAY&FUTURE INC	Electric vehicle battery monitoring system
<a href="#">WO 2017154553</a>	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Structure for connecting electrical storage module and control device
<a href="#">WO 2017154592</a>	HITACHI MAXELL	Nonaqueous electrolyte battery
<a href="#">WO 2017155011</a>	TOKYO ELECTRIC POWER COMPANY HOLDINGS INCORPORATED UNIV TOKYO METROPOLITAN	All-solid-state lithium-sulfur battery and production method for same
<a href="#">WO 2017154631</a>	SUMITOMO METAL MINING CO	Positive electrode for nonaqueous electrolyte secondary batteries, positive electrode active material used for same, and secondary battery using same
<a href="#">WO 2017140382</a>	TOYOTA MOTOR EUROPE	Systems and methods for battery micro-short estimation
<a href="#">WO 2017154908</a>	TOSHIBA KK	Non-aqueous electrolyte cell and cell pack
<a href="#">WO 2017155272</a>	SK INNOVATION CO LTD	Battery overcharging prevention device and battery overcharging prevention method using same
<a href="#">WO 2017155928</a>	UNIV MICHIGAN REGENTS	Method to charge lithium-ion batteries with user, cell and temperature awareness
<a href="#">WO 2017137107</a>	SIEMENS AG	Robust current limitation for an electric drive
<a href="#">WO 2017154760</a>	NEC CORP	Charging facility guidance system, charging facility guidance method, and program storage medium
<a href="#">WO 2017119494</a>	NAT INST ADVANCED IND SCIENCE & TECH	Magnesium compound, positive electrode active material for secondary battery, secondary battery, and magnesium compound production method
<a href="#">WO 2017126312</a>	HITACHI METALS LTD	Positive electrode active material for lithium ion secondary battery, method for manufacturing same, and lithium ion secondary battery
<a href="#">WO 2017126271</a>	CALSONIC KANSEI CORP	Assembled battery
<a href="#">WO 2017130410</a>	YAMAHA MOTOR CO LTD	Electric-vehicle battery charging system
<a href="#">WO 2017130832</a>	FUJIFILM CORP	Solid electrolyte composition, solid electrolyte-containing sheet, all-solid-state secondary battery, method for producing solid electrolyte-containing sheet, and method for manufacturing all-solid-state secondary battery
<a href="#">WO 2017130702</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Rectangular secondary battery
<a href="#">WO 2017135790</a>	LG CHEMICAL LTD	Cable-type secondary battery
<a href="#">WO 2017138116</a>	HITACHI LTD	Lithium ion battery and method for manufacturing same
<a href="#">WO 2017138309</a>	SONY CORP	Secondary battery positive electrode active material, secondary battery positive electrode, secondary battery, battery pack, electric vehicle, electric power storage system, electric tool, and electronic apparatus

<a href="#">WO 2017138382</a>	NEC ENERGY DEVICES LTD	Positive electrode for lithium ion secondary battery, lithium ion secondary battery, and method of producing and method of evaluating positive electrode for lithium ion secondary battery
<a href="#">WO 2017138753</a>	LG CHEMICAL LTD	Cartridge for secondary battery and secondary battery pack comprising same
<a href="#">WO 2017139967</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery pack balancing method, battery management system and battery system
<a href="#">WO 2017142587</a>	JOHNSON CONTROLS TECH CO	Systems and methods for real-time parameter estimation of a rechargeable battery
<a href="#">WO 2017144564</a>	BOSCH GMBH ROBERT	Battery system
<a href="#">WO 2017148814</a>	BAYERISCHE MOTOREN WERKE AG	Method and device for operating a hybrid vehicle having an electrical energy store, an electric motor and an internal combustion engine
<a href="#">WO 2017149217</a>	VALEO SYSTEMES THERMIQUES	Heat exchanger with a flexible wall for the heat management of an electric battery
<a href="#">WO 2017119106</a>	MITSUBISHI ELECTRIC CORP	Power storage module
<a href="#">WO 2017122359</a>	HITACHI LTD	Lithium ion battery and method for manufacturing same
<a href="#">WO 2017124209</a>	JIEHAO YIGUI	Technology for input and output cycling between two battery packs
<a href="#">WO 2017127694</a>	CALIFORNIA INST OF TECHN	Vertical carbon nanotube and lithium ion battery chemistries
<a href="#">WO 2017129520</a>	BOSCH GMBH ROBERT	Secondary battery management
<a href="#">WO 2017129305</a>	BAYERISCHE MOTOREN WERKE AG	Connector system, battery module, method for forming a tap, and operating device
<a href="#">WO 2017130622</a>	NAT INST ADVANCED IND SCIENCE & TECH	Solid electrolyte material and all solid lithium ion secondary battery
<a href="#">WO 2017145874</a>	NISSAN MOTOR	Electrode for lithium ion secondary battery and production method therefor
<a href="#">WO 2017144216</a>	BAYERISCHE MOTOREN WERKE AG	Energy storage housing, vehicle with an energy storage housing, and set of energy storage housings
<a href="#">WO 2017146387</a>	LG CHEMICAL LTD	Battery pack and vehicle having battery pack
<a href="#">WO 2017150012</a>	SANYO ELECTRIC CO	Battery system and electrically driven vehicle equipped with battery system
<a href="#">WO 2017149144</a>	JOHNSON CONTROLS TECH CO JOHNSON CONTROLS ADVANCED POWER SOLUTIONS GMBH	Turnable carrier for electrical components of a battery module
<a href="#">WO 2017115605</a>	NISSAN MOTOR	High-current processing for lithium ion battery having metal-based negative electrode
<a href="#">WO 2017123014</a>	LG CHEMICAL LTD	Battery pack comprising battery modules mounted in two layers
<a href="#">WO 2017123034</a>	LS MTRON LTD	Copper foil, method for manufacturing same, electrode comprising same, and secondary battery comprising same
<a href="#">WO 2017126693</a>	ASAHI CHEMICAL IND	Nonaqueous lithium storage element
<a href="#">WO 2017131988</a>	MICROSOFT TECHNOLOGY LICENSING LLC	Dynamic battery loading for electric vehicles
<a href="#">WO 2017131155</a>	DAINIPPON PRINTING CO LTD	Packaging material and cell
<a href="#">WO 2017142295</a>	INDUSTRY-UNIV COOP FOUND HANYANG UNIV	Method for preparing sulfide-based solid electrolyte, sulfide-based solid electrolyte prepared therefrom, and all-solid lithium secondary battery comprising same
<a href="#">WO 2017142585</a>	JOHNSON CONTROLS TECH CO	Systems and methods for directional capacity estimation of a rechargeable battery
<a href="#">WO 2017142586</a>	JOHNSON CONTROLS TECH CO	Systems and methods for real-time estimation of capacity of a rechargeable battery
<a href="#">WO 2017145654</a>	SHIN-ETSU CHEMICAL CO LTD	Negative electrode active material for nonaqueous electrolyte secondary batteries, nonaqueous electrolyte secondary battery, and method for producing negative electrode material for nonaqueous electrolyte secondary batteries

<a href="#">WO 2017145894</a>	FUJIFILM CORP	Electrode active material for secondary batteries, solid electrolyte composition, electrode sheet for all-solid-state secondary batteries, all-solid-state secondary battery, method for producing electrode active material for secondary batteries, method for producing electrode sheet for all-solid-state secondary batteries, and method for manufacturing all-solid-state secondary battery
<a href="#">WO 2017146395</a>	LG CHEMICAL LTD	Electrical box for battery pack and battery pack structure using same
<a href="#">WO 2017148610</a>	LITHIUM ENERGY AND POWER GMBH & CO KG	Method for manufacturing energy storage device and energy storage device
<a href="#">WO 2017150504</a>	MITSUI MINING & SMELTING CO	Spinel-type lithium-manganese-containing complex oxide
<a href="#">WO 2017149927</a>	NEC ENERGY DEVICES LTD	Positive electrode for lithium ion secondary batteries, and lithium ion secondary battery
<a href="#">WO 2017115404</a>	ELIHY POWER CO LTD	Power storage device, housing sealing structure and housing production method
<a href="#">WO 2017115630</a>	CALSONIC KANSEI CORP	Overcurrent cutoff system
<a href="#">WO 2017122597</a>	UNIV TOKYO	Aqueous electrolytic solution for electrical storage device, and electrical storage device including said aqueous electrolytic solution
<a href="#">WO 2017122438</a>	SONY CORP	Battery pack
<a href="#">WO 2017123003</a>	LG CHEMICAL LTD	Battery module assembly having stable fixing means for unit modules
<a href="#">WO 2017122967</a>	LG CHEMICAL LTD	Battery pack having minimized loading space for device
<a href="#">WO 2017130493</a>	HITACHI HIGH-TECH FINE SYSTEMS CORP	Powder for separators, slurry for separators, lithium ion battery and method for manufacturing same
<a href="#">WO 2017138704</a>	LG CHEMICAL LTD	Busbar for cooling battery cell and battery module using same
<a href="#">WO 2017140450</a>	BAYERISCHE MOTOREN WERKE AG	Battery cell module having a cooling element
<a href="#">WO 2017145497</a>	HITACHI CHEMICAL CO LTD	Lithium ion secondary battery
<a href="#">WO 2017150506</a>	MITSUI MINING & SMELTING CO	Positive electrode active material for lithium secondary battery
<a href="#">WO 2017150802</a>	LG CHEMICAL LTD	Battery module, battery pack comprising same, and vehicle
<a href="#">WO 2017149146</a>	JOHNSON CONTROLS TECH CO JOHNSON CONTROLS ADVANCED POWER SOLUTIONS GMBH	Fixation of electrochemical cells in a housing of a battery module
<a href="#">WO 2017149977</a>	PANASONIC IP MAN CO LTD	Non-aqueous electrolyte secondary battery
<a href="#">WO 2017150949</a>	LG CHEMICAL LTD	Cathode active material for secondary battery, manufacturing method therefor, and secondary battery including same
<a href="#">WO 2017116088</a>	HYOSUNG CORP	Method and device for estimating battery life
<a href="#">WO 2017119493</a>	NAT INST ADVANCED IND SCIENCE & TECH	Positive electrode active material for secondary battery, production method therefor, and secondary battery
<a href="#">WO 2017119775</a>	LG CHEMICAL LTD	Battery pack
<a href="#">WO 2017119212</a>	NISSAN MOTOR	Charging wait time calculation system and method
<a href="#">WO 2017119410</a>	NAT INST ADVANCED IND SCIENCE & TECH	Lithium-copper composite oxide
<a href="#">WO 2017122759</a>	GS YUASA INT LTD	Electricity storage element
<a href="#">WO 2017124875</a>	ZENG JI	Heat-dissipation device for battery pack of electric vehicle
<a href="#">WO 2017131377</a>	LG CHEMICAL LTD KOREA ADVANCED INST SCI & TECH	Lithium-sulfur battery separation film having composite coating layer including polydopamine, manufacturing method therefor, and lithium-sulfur battery comprising same
<a href="#">WO 2017138733</a>	LG CHEMICAL LTD	Integrated cartridge and battery pack comprising same
<a href="#">WO 2017137826</a>	SUMITOMO WIRING SYSTEMS	Charging connector, terminal fitting and method of fixing a sensor to a terminal fitting
<a href="#">WO 2017141613</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Rectangular secondary battery
<a href="#">WO 2017145614</a>	SANYO ELECTRIC CO	Power supply system
<a href="#">WO 2017146384</a>	LG CHEMICAL LTD	Battery module, battery pack including battery module, and vehicle including battery pack

<a href="#">WO 2017149135</a>	JOHNSON CONTROLS TECH CO JOHNSON CONTROLS ADVANCED POWER SOLUTIONS GMBH	Signal connector for a battery module
<a href="#">WO 2017150522</a>	MITSUI MINING & SMELTING CO	Positive electrode active material for lithium secondary battery
<a href="#">WO 2017150143</a>	NIPPON SHEET GLASS CO LTD	Separator for nonaqueous-electrolytic-solution secondary batteries, and nonaqueous-electrolytic-solution secondary battery
<a href="#">WO 2017121500</a>	LITHIUM ENERGY AND POWER GMBH & CO KG	Energy storage device
<a href="#">WO 2017124859</a>	GRST INT LTD	Method of preparing battery electrodes
<a href="#">WO 2017124715</a>	CHINA ELECTRIC POWER RES INST ARIZONA STATE UNIV STATE GRID CORP CHINA NORTH CHINA BRANCH OF STATE GRID CORP OF CHINA	Lithium-ion battery separator and preparation method therefor
<a href="#">WO 2017126286</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Power storage device
<a href="#">WO 2017146555</a>	LG CHEMICAL LTD	Lithium secondary battery
<a href="#">WO 2017146237</a>	ASAHI CHEMICAL IND	Nonaqueous electrolyte battery inorganic particles and nonaqueous electrolyte battery
<a href="#">WO 2017143514</a>	TEXAS INSTRUMENTS INC TEXAS INSTRUMENTS JAPAN	Battery apparatus and cell balancing circuits
<a href="#">WO 2017146369</a>	LG CHEMICAL LTD	Battery cell and method for manufacturing such battery cell
<a href="#">WO 2017149731</a>	HITACHI LTD NISSHIN KASEI CO LTD	Negative-electrode material for lithium-ion battery, lithium-ion battery, and method for manufacturing negative-electrode material for lithium-ion battery
<a href="#">WO 2017150195</a>	SONY CORP	Battery pack and charge-discharge control method
<a href="#">WO 2017150893</a>	LG CHEMICAL LTD	Cathode active material for lithium secondary battery and preparation method therefor
<a href="#">WO 2017119697</a>	SIGNET SYSTEM INC	Electric vehicle charger
<a href="#">WO 2017126918</a>	LG CHEMICAL LTD	Electrode assembly and method for manufacturing same
<a href="#">WO 2017130574</a>	DAICEL CORP	Secondary battery
<a href="#">WO 2017135600</a>	LG CHEMICAL LTD	Battery module and battery pack comprising same
<a href="#">WO 2017148622</a>	BOSCH GMBH ROBERT	Battery pack
<a href="#">WO 2017115639</a>	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Wiring module
<a href="#">WO 2017119675</a>	LG CHEMICAL LTD	Battery cell comprising extended electrode lead
<a href="#">WO 2017123029</a>	LG CHEMICAL LTD	Anode active material for lithium secondary battery and preparation method therefor
<a href="#">WO 2017126274</a>	CALSONIC KANSEI CORP	Assembled battery production method and assembled battery
<a href="#">WO 2017130705</a>	SANYO ELECTRIC CO	Power supply device, vehicle in which same is used, and bus bar
<a href="#">WO 2017131080</a>	SONY CORP	Negative electrode for secondary batteries, secondary battery, battery pack, electric vehicle, electric power storage system, electric tool and electronic device
<a href="#">WO 2017131051</a>	NAT INST FOR QUANTUM AND RADIOLOGICAL SCIENCE AND TECH	Lithium-selective permeable membrane, lithium recovery device, lithium recovery method and hydrogen production method
<a href="#">WO 2017131432</a>	PARK DONG SIK	Battery module and energy storing device having same
<a href="#">WO 2017120884</a>	GM GLOBAL TECH OPERATIONS LLC DENG SHAWN	Quinary electrolytes for high power lithium ion batteries



<a href="#">WO 2017143754</a>	BYD CO LTD	Single-cell battery, battery module, battery pack, and electric vehicle
<a href="#">WO 2017143753</a>	BYD CO LTD	Single-cell battery, battery module, power battery, and electric vehicle
<a href="#">WO 2017131414</a>	LG CHEMICAL LTD	Battery cell and method for manufacturing battery cell
<a href="#">WO 2017130715</a>	KK TOYOTA JIDOSHOKKI	Power storage device
<a href="#">WO 2017138537</a>	HITACHI CHEMICAL CO LTD	Binder resin composition, method for producing binder resin composition, composition for forming lithium ion secondary battery electrode, method for producing composition for forming lithium ion secondary battery electrode, electrode for lithium ion secondary batteries, and lithium ion secondary battery
<a href="#">WO 2017143021</a>	II-VI INCORPORATED	Immobilized selenium, a method of making, and uses of immobilized selenium in a rechargeable battery
	INST CHEMISTRY CAS	
<a href="#">WO 2017143748</a>	BYD CO LTD	Power battery, protection system thereof, and electric vehicle
<a href="#">WO 2017143749</a>	BYD CO LTD	Single-cell battery, battery module, power battery, and electric automobile
<a href="#">WO 2017135793</a>	LG CHEMICAL LTD	Cable-type secondary battery and manufacturing method therefor
<a href="#">WO 2017136489</a>	CASPO LLC	Smart cooking system that produces and uses hydrogen fuel
<a href="#">WO 2017143830</a>	HUAWEI TECH CO LTD	Method and device for detecting state of health of battery, and battery management system
<a href="#">WO 2017146379</a>	LG CHEMICAL LTD	Battery module, battery pack and vehicle having same
<a href="#">WO 2017115373</a>	PHINERGY LTD	System and method for protecting a battery during sudden load reduction
<a href="#">WO 2017138583</a>	GS YUASA INT LTD	Power storage element and power storage element production method
<a href="#">WO 2017142071</a>	DAINIPPON PRINTING CO LTD	Battery packaging material, battery, and production method for battery packaging material
<a href="#">WO 2017130258</a>	PANASONIC IP MAN CO LTD	Management device and power storage system
<a href="#">WO 2017142261</a>	LG CHEMICAL LTD	Negative electrode manufacturing method and negative electrode
<a href="#">WO 2017143750</a>	BYD CO LTD	Single-cell battery, battery module, power battery, and electric vehicle
<a href="#">WO 2017125592</a>	IMERYS GRAPHITE & CARBON SWITZERLAND LTD IMERYS G C JAPAN CO LTD	Carbonaceous materials and methods of use thereof
<a href="#">WO 2017143751</a>	BYD CO LTD	Single-cell battery, battery module, power battery, and electric vehicle
<a href="#">WO 2017146386</a>	LG CHEMICAL LTD	Roll press, and lamination method using roll press
<a href="#">WO 2017146248</a>	MITSUI MINING & SMELTING CO	Lithium metal composite oxide having layered structure
<a href="#">WO 2017148653</a>	BOSCH GMBH ROBERT	Method for producing an electrode, electrode and battery cell
<a href="#">WO 2017132370</a>	UNIV COLUMBIA	Alkali metal battery electrodes and related methods
<a href="#">WO 2017143752</a>	BYD CO LTD	Single-cell battery, battery module, power battery, and electric vehicle
<a href="#">WO 2017130040</a>	ATHER ENERGY PVT LTD	A vehicle with an integrated battery casing
<a href="#">WO 2017143329</a>	LIANG XINHUA PATEL RAJANKUMAR L	Lithium ion battery electrode

[...volver a CONTENIDO](#)

## SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2017155260</a>	LG CHEMICAL LTD	Charging/discharging current estimation device
<a href="#">WO 2017149204</a>	BROADBIT BATTERIES OY	Rechargeable sodium cells for high energy density battery use
<a href="#">WO 2017125207</a>	BOSCH GMBH ROBERT	Method for controlling the intermediate circuit voltage of a hybrid or electric vehicle after disconnection of the high-voltage battery
<a href="#">WO 2017150460</a>	NIPPON ELECTRIC GLASS CO	Wound-type film capacitor
<a href="#">WO 2017121605</a>	BAYERISCHE MOTOREN WERKE AG	Heating system, electric or hybrid vehicle comprising such a heating system and method for operating a heating system
<a href="#">WO 2017149599</a>	MITSUBISHI ELECTRIC ENG COMPANY LTD	Resonance-type wireless power transmission device
<a href="#">WO 2017139289</a>	VOLTSERVER INC	Digital electricity transmission system using reversal sensing packet energy transfer
<a href="#">WO 2017125204</a>	BOSCH GMBH ROBERT	Bidirectional dc/dc converter and method for charging the intermediate circuit capacitor of a dc/dc converter from the low-voltage battery

[...volver a CONTENIDO](#)



## SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2017129092</a>	BYD CO LTD	Auxiliary braking system for electric automobile and control method thereof, and electric automobile
<a href="#">WO 2017157502</a>	WABCO GMBH	Electronic brake system for a trailer vehicle
<a href="#">WO 2017148471</a>	FEV GMBH	Method for testing electrical functions in a vehicle
<a href="#">WO 2017151035</a>	ECOMB AB (PUBL)	Method of oxygenating water and producing hydrogen
<a href="#">WO 2017132282</a>	UNIV CALIFORNIA DUAN XIANGFENG	Graphene frameworks for supercapacitors
<a href="#">WO 2017151792</a>	GENTHERM INCORPORATED	Systems and methods for supplying power in a hybrid vehicle using capacitors, a battery and one or more dc/dc converters
<a href="#">WO 2017129091</a>	BYD CO LTD	Collision avoidance system of electric vehicle, control method therefor, and electric vehicle
<a href="#">WO 2017146194</a>	ADVICS CO LTD	Braking device for vehicle
<a href="#">WO 2017144156</a>	HÖSS BERNHARD KOBLER SEBASTIAN	Drive system for a hybrid vehicle and method for operating such a drive system
<a href="#">WO 2017124210</a>	JIEHAO YIGUI	Technology for automatically controlling disc generators for wheels
<a href="#">WO 2017138385</a>	ISUZU MOTORS LTD	Hybrid vehicle and hybrid vehicle control method

[...volver a CONTENIDO](#)

## MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2017143434</a>	CANADIAN SPACE AGENCY	Energy-efficient motor drive with or without open-circuited phase
<a href="#">WO 2017153061</a>	BOSCH GMBH ROBERT	Electric machine having high rotational-speed resistance
<a href="#">WO 2017156358</a>	BORGWARNER INC	Clutch and electric motor
<a href="#">WO 2017158933</a>	NTN TOYO BEARING CO LTD	In-wheel motor drive device
<a href="#">WO 2017133824</a>	BOSCH GMBH ROBERT	Method, angle determination apparatus and control apparatus
<a href="#">WO 2017154625</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Electric fluid pump
<a href="#">WO 2017154536</a>	PANASONIC IP MAN CO LTD	Electrically driven pump
<a href="#">WO 2017121520</a>	BAYERISCHE MOTOREN WERKE AG	Electric machine
<a href="#">WO 2017121567</a>	JAGUAR LAND ROVER LTD	Rotor for an electric machine
<a href="#">WO 2017129165</a>	SCHAEFFLER TECHNOLOGIES AG	Clutch arrangement and drive train for a motor vehicle
<a href="#">WO 2017149816</a>	NTN TOYO BEARING CO LTD	In-wheel motor drive device
<a href="#">WO 2017119240</a>	NTN TOYO BEARING CO LTD	In-wheel motor drive device
<a href="#">WO 2017145653</a>	NTN TOYO BEARING CO LTD	In-wheel motor drive device
<a href="#">WO 2017141940</a>	NSK LTD	Electric vehicle drive device
<a href="#">WO 2017142036</a>	FURUKAWA ELECTRIC CO LTD FURUKAWA MAGNET WIRE CO LTD	Insulated electrical wire, motor coil and electrical/electronic apparatus
<a href="#">WO 2017140484</a>	JAGUAR LAND ROVER LTD	Electric machine and configuration method
<a href="#">WO 2017116314</a>	YIANGKAMOLSING CHANA	A set of electric motor for multi-purpose usage
<a href="#">WO 2017132075</a>	URBAN MINING COMPANY	Grain boundary engineering of sintered magnetic alloys and the compositions derived therefrom
<a href="#">WO 2017148601</a>	BOSCH GMBH ROBERT	Asynchronous machine
<a href="#">WO 2017149939</a>	HITACHI CONSTRUCTION MACH CO	Hybrid work machine
<a href="#">WO 2017121930</a>	VALEO EQUIP ELECTR MOTEUR	Rotary electric machine with improved cooling
<a href="#">WO 2017121994</a>	UNIV OF NEWCASTLE UPON TYNE	Rotor assembly

[...volver a CONTENIDO](#)

## CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2017158253</a>	INST VEDECOM	Cooled electronic power module, motor and vehicle comprising such a module
<a href="#">WO 2017157680</a>	SIEMENS AG	Semiconductor module and method for the production thereof
<a href="#">WO 2017159150</a>	DENSO CORP	Temperature regulating device for magnetic circuit component
<a href="#">WO 2017133962</a>	CONTINENTAL AUTOMOTIVE GMBH	Dc voltage converter arrangement for an electric machine
<a href="#">WO 2017159485</a>	AUTONETWORKS TECHNOLOGIES LTD SUMITOMO WIRING SYSTEMS SUMITOMO ELECTRIC INDUSTRIES	Vehicular power supply system, vehicular driving system
<a href="#">WO 2017122519</a>	SUMITOMO ELECTRIC INDUSTRIES	Power conversion device and control method for power conversion device
<a href="#">WO 2017150989</a>	UNIV OF WAIKATO	Electrical inverter assembly
<a href="#">WO 2017151691</a>	CARBYNE ENTPR INC	Hybrid vehicle conversion system
<a href="#">WO 2017119753</a>	LG INNOTEK CO LTD	Power conversion device
<a href="#">WO 2017149776</a>	mitsubishi electric corp	Power conversion device
<a href="#">WO 2017148670</a>	BOSCH GMBH ROBERT	Device for charging an electric energy store, and method for initializing a charging process for an electric energy store
<a href="#">WO 2017150588</a>	JNC CORP OSAKA MUNICIPAL TECH RES INST	Composition for heat-dissipating member, heat-dissipating member, electronic instrument, method for producing composition for heat-dissipating member, and method for producing heat-dissipating member
<a href="#">WO 2017126261</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Direct current sensor, alternating current sensor, and inverter comprising same
<a href="#">WO 2017147644</a>	MINE MOBILE POWER PTY LTD	An underground mining vehicle for providing electrical supply
<a href="#">WO 2017119113</a>	MITSUBISHI ELECTRIC CORP	Evaporative cooling device and evaporative cooling system
<a href="#">WO 2017130668</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Power conversion device
<a href="#">WO 2017149972</a>	DENSO CORP	Electric power converter
<a href="#">WO 2017126047</a>	MITSUBISHI ELECTRIC CORP	Power conditioner
<a href="#">WO 2017141872</a>	DENSO CORP	Inverter control apparatus
<a href="#">WO 2017122390</a>	MITSUBISHI ELECTRIC CORP	Power conversion device and motor driving device in which same is used
<a href="#">WO 2017135070</a>	DENSO CORP	Power conversion device
<a href="#">WO 2017152181</a>	QATAR FOUND FOR EDUCATION SCIENCE AND COMMUNITY DEV QATAR UNIV TARIQ MOHD	Cascaded packed u-cell multilevel inverter
<a href="#">WO 2017131177</a>	KYOCERA CORP	Film with metal film, film capacitor using same, connected capacitor, inverter and electric vehicle
<a href="#">WO 2017141522</a>	IHI CORP	Electrical power transmission device
<a href="#">WO 2017135071</a>	DENSO CORP	Power conversion device
<a href="#">WO 2017145449</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Electrical circuit device
<a href="#">WO 2017139872</a>	TM4 INC	Power inverter with dynamic current limiting
<a href="#">WO 2017145338</a>	MITSUBISHI ELECTRIC CORP	Power conversion apparatus

[...volver a CONTENIDO](#)

## RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2017147613</a>	MIFTAKHOV VALERY	Standalone adapter for load control of energy storage devices
<a href="#">WO 2017135997</a>	JOHNSON CONTROLS TECH CO	Integrated battery safety interlock
<a href="#">WO 2017134052</a>	CONTINENTAL AUTOMOTIVE GMBH	High-voltage vehicle electrical system and stationary connection device
<a href="#">WO 2017154985</a>	NEC CORP	Vehicle-charging system, parking lot system, and method for charging vehicle
<a href="#">WO 2017133869</a>	CONTI TEMIC MICROELECTRONIC GMBH	Method and system for charging motor vehicles at public charging stations
<a href="#">WO 2017137234</a>	BAYERISCHE MOTOREN WERKE AG	Dynamic communication of actual charging capacity
<a href="#">WO 2017155859</a>	QUALCOMM INC	Method and apparatus for positioning a vehicle
<a href="#">WO 2017133760</a>	TOYOTA MOTOR EUROPE NV/SA	Control device and method for discharging a rechargeable battery
<a href="#">WO 2017153366</a>	RENAULT SAS CENTRE NAT DE LA RECH SCIENT (CNRS) ECOLE NORMALE SUPERIEURE DE CACHAN CONSERVATOIRE NAT DES ARTS ET MÉTIERS	Method and device for single-phase control of an on-board charger of electric or hybrid vehicles without galvanic isolation
<a href="#">WO 2017153683</a>	COMMISSARIAT ENERGIE ATOMIQUE	Cable reel for recharging an electric vehicle
<a href="#">WO 2017153080</a>	BAYERISCHE MOTOREN WERKE AG	Inductive charging system for a vehicle, and use
<a href="#">WO 2017140354</a>	TOYOTA MOTOR EUROPE	Systems and methods for battery charge control
<a href="#">WO 2017133759</a>	TOYOTA MOTOR EUROPE NV/SA	Control device and method for charging a rechargeable battery
<a href="#">WO 2017154419</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Battery management system, battery system and hybrid vehicle control system
<a href="#">WO 2017118807</a>	RENAULT SAS	Method and system for actively discharging the input capacitors of an onboard charger of an electric or hybrid vehicle
<a href="#">WO 2017138508</a>	HONDA MOTOR CO LTD	Contact charging system, power feeding device, power receiving device, and contact charging method
<a href="#">WO 2017147612</a>	CALIFORNIA INST OF TECHN	Adaptive charging network using adaptive charging stations for electric vehicles
<a href="#">WO 2017148547</a>	RWE EFFIZIENZ GMBH	Measuring transducer
<a href="#">WO 2017125347</a>	BAYERISCHE MOTOREN WERKE AG	Improved energy storage arrangement comprising multiple energy stores
<a href="#">WO 2017127428</a>	CONDUCTIX INC	Retractable cable or hose system
<a href="#">WO 2017129693</a>	BOMBARDIER PRIMOVE GMBH	Arrangement with battery system for providing electric energy to a vehicle
<a href="#">WO 2017144137</a>	BAYERISCHE MOTOREN WERKE AG	Method for controlling electrical charging of a group of vehicles
<a href="#">WO 2017121509</a>	VOLKSWAGEN AG	Electrical system for a vehicle, vehicle and method for carrying out a charging process
<a href="#">WO 2017129653</a>	BOMBARDIER PRIMOVE GMBH	An inductive power transfer pad, system for inductive transfer and method of operating an inductive power transfer pad
<a href="#">WO 2017141329</a>	MITSUBISHI ELECTRIC CORP	Protocol conversion apparatus
<a href="#">WO 2017150416</a>	NEC CORP	Degradation determination method and electricity storage system
<a href="#">WO 2017151784</a>	GENTHERM INCORPORATED	System and method for supplying power in a hybrid vehicle provided with capacitors, a battery and one or more dc/dc converters
<a href="#">WO 2017129654</a>	BOMBARDIER PRIMOVE GMBH	A system and a method for detecting an authorized secondary unit in a system for inductive power transfer

<a href="#">WO 2017144473</a>	CONTINENTAL AUTOMOTIVE GMBH	Battery system with a voltage equalising circuit, and method for identifying a defective state of the voltage equalising circuit and cell voltage measurement
<a href="#">WO 2017149638</a>	MITSUBISHI ELECTRIC CORP	Charge/discharge device
<a href="#">WO 2017150709</a>	YAMAHA MOTOR CO LTD	Wireless power supply device and straddle-type vehicle
<a href="#">WO 2017117702</a>	ABB SCHWEIZ AG HUANG XING KAPTEIN JOHAN YU RONGRONG CHEN YAO	Control system for electric vehicle station and control method for the same
<a href="#">WO 2017118555</a>	BLUETRAM	Safety system for an electromechanical coupling assembly, charging station for an electric vehicle provided with such a system and associated coupling method
<a href="#">WO 2017129264</a>	TOYOTA MOTOR EUROPE NV/SA	Control device and method for charging a rechargeable battery
<a href="#">WO 2017134951</a>	TOSHIBA KK	Charging device and positional deviation detection method
<a href="#">WO 2017119926</a>	JOHNSON CONTROLS TECH CO	Battery module lithium plating reduction
<a href="#">WO 2017129259</a>	TOYOTA MOTOR EUROPE NV/SA	Control device and method for discharging a rechargeable battery
<a href="#">WO 2017136491</a>	WITRICITY CORP	Controlling wireless power transfer systems
<a href="#">WO 2017151788</a>	GENTHERM INCORPORATED	A battery and capacitor assembly for a vehicle and a method for heating and cooling the battery and capacitor assembly
<a href="#">WO 2017141156</a>	ALFAZERO S P A	System and method for recharging an electric vehicle with direct current
<a href="#">WO 2017144136</a>	BAYERISCHE MOTOREN WERKE AG	Method for controlling the electrical charging of a group of vehicles
<a href="#">WO 2017130689</a>	PANASONIC IP MAN CO LTD	Noncontact power supply system
<a href="#">WO 2017130564</a>	DENSO CORP	Charging/discharging system
<a href="#">WO 2017132529</a>	THE UNIV OF TOLEDO	A bilevel equalizer for battery cell charge management
<a href="#">WO 2017139546</a>	RADIO FLYER INC	Dual charge ride-on vehicle
<a href="#">WO 2017144135</a>	BAYERISCHE MOTOREN WERKE AG	Method and central control system for controlling the electrical charging of a group of vehicles
<a href="#">WO 2017138225</a>	SUMITOMO ELECTRIC INDUSTRIES	Charge and discharge assist device, computer program, and charge and discharge assist method
<a href="#">WO 2017138939</a>	LEAR CORP	Vehicle charge-cord system
<a href="#">WO 2017139682</a>	CAPACITOR SCIENCES INCORPORATED	Improved energy storage system using capacitors
<a href="#">WO 2017143051</a>	ELECTRIC FEEL LLC	Electric vehicle charging system and methods of use
<a href="#">WO 2017139677</a>	CAPACITOR SCIENCES INCORPORATED	Electric vehicle powered by capacitive energy storage modules

[...volver a CONTENIDO](#)

## CAMBIO DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2017139444</a>	NEXTEV USA INC	Vehicle having a rigid frame structure for receiving a replaceable battery pack

[...volver a CONTENIDO](#)



# iiPor sólo 500€ añada 150 especialistas\* a su Equipo de I+D!!



Los ITPs\*\* de la OEPM nos proporcionan información imprescindible para decidir la priorización óptima de proyectos de I+D en los que invertir.



**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**



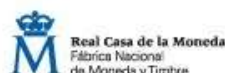
Los ITPs\*\* de la OEPM detectaron solicitudes de patente relevantes cuando estábamos a mitad del proyecto y gracias a ello pudimos reconducir nuestra investigación.



**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.



\* La OEPM cuenta con más de 150 examinadores de patentes especializados en los diversos sectores tecnológicos y en la búsqueda de información científico-técnica.

\*\* Los Informes Tecnológicos de Patentes o ITPs son estudios a la medida que incluyen una búsqueda de patentes y de literatura científica con un análisis en profundidad de los documentos más relevantes. Su coste es de 440 euros más IVA.