

### Noticias

El 17 de junio de 2020, apareció publicado en el [BOE](#) el Real Decreto 569/2020, de 16 de junio, por el que se regula el programa de incentivos a la movilidad eficiente y sostenible (Programa MOVES II) y se acuerda la concesión directa de las ayudas de este programa a las comunidades autónomas y a las ciudades de Ceuta y Melilla.

Esta iniciativa, incluida en el 'Plan de impulso de la cadena de valor de la industria de la automoción: Hacia una movilidad sostenible y conectada', dará ayudas directas a:

- La adquisición de vehículos eléctricos o híbridos enchufables.
- La instalación de infraestructura de recarga de vehículos electrificados.
- Sistemas de préstamos de bicicletas eléctricas.
- Puesta en marcha de planes de transporte a los centros de trabajo.

La nueva edición del MOVES cuenta con 55 millones de euros más de presupuesto (+122%) que el anterior.

Este año, como novedad, se abren dos opciones de compra, con o sin achatarramiento. Las personas que opten por dar de baja un vehículo obtendrán una mayor ayuda, pero el modelo tendrá que tener más de siete años de antigüedad y haber estado a nombre del demandante al menos desde hace un año.

El 29 de junio de 2020, tuvo lugar la primera reunión de la [Mesa de la Automoción](#) convocada por el Ministerio de Industria, Comercio y Turismo, junto con el Ministerio para la Transición Ecológica.

A dicha reunión acudió la [Asociación Empresarial para el Desarrollo e Impulso de la Movilidad Eléctrica \(AEDIVE\)](#), la cual puso en valor al vehículo eléctrico como eje de sostenibilidad en la movilidad, de eficiencia energética, y destacó el papel de la cadena de valor de las infraestructuras de recarga del vehículo eléctrico como parte de la nueva industria de la Automoción.

También puso en relieve la creciente importancia de industria de las dos ruedas eléctricas, y destacó el desarrollo que se está llevando a cabo de proyectos de fabricación de vehículos eléctricos en España y con órganos de decisión en nuestro país, y el impulso de proyectos de movilidad eléctrica conectada y autónoma con empresas asociadas, en diversas ciudades españolas.

En la Mesa de la Automoción también participó el comisario para el Mercado Interior de la UE, Thierry Bretón, quien puso el foco en el impulso del vehículo eléctrico y sus infraestructuras de recarga, así como en la necesidad de apostar por la industria 4.0, la movilidad conectada, el almacenamiento energético y el hidrógeno, así como en la formación y en la reconversión, como oportunidad para modernizar la economía.

[BOLETINES OEPM](#)

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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
<a href="#">WO 2020067378 A1</a>	SEKISUI CHEMICAL CO LTD	Electrode for lithium ion secondary batteries, and lithium ion secondary battery
<a href="#">WO 2020067769 A1</a>	LG CHEMICAL LTD	Solid electrolyte and method for manufacturing same
<a href="#">WO 2020067845 A1</a>	LG CHEMICAL LTD	Separator, having improved electrode adhesion and resistance property, for lithium secondary battery, and lithium secondary battery comprising same separator
<a href="#">WO 2020075503 A1</a>	VEHICLE ENERGY JAPAN INC	Battery control device
<a href="#">WO 2020075507 A1</a>	VEHICLE ENERGY JAPAN INC	Battery pack
<a href="#">WO 2020129477 A1</a>	PANASONIC IP MAN CO LTD	Battery state estimation device, battery state estimation method, and battery system
<a href="#">WO 2020129478 A1</a>	PANASONIC IP MAN CO LTD	Battery state estimation device, battery state estimation method, and battery system
<a href="#">WO 2020065831 A1</a>	MURATA MANUFACTURING CO	Lithium ion secondary battery
<a href="#">WO 2020067370 A1</a>	GS YUASA INT LTD	Non-aqueous electrolyte, non-aqueous electrolyte storage element, method for manufacturing non-aqueous electrolyte storage element, and method for using non-aqueous electrolyte storage element
<a href="#">WO 2020076139 A1</a>	LG CHEMICAL LTD	Negative electrode and rechargeable battery comprising same
<a href="#">WO 2020116937 A1</a>	LG CHEMICAL LTD	Battery module
<a href="#">WO 2020128702 A1</a>	SEMICONDUCTOR ENERGY LAB	Over-discharge prevention circuit for secondary battery and secondary battery module
<a href="#">WO 2020074556 A1</a>	VITESCO TECH GMBH	Connecting an electrified vehicle to the air-conditioning system of a building
<a href="#">WO 2020074255 A1</a>	BAYERISCHE MOTOREN WERKE AG	Vehicle with a high-voltage store, and high-voltage store
<a href="#">WO 2020122497 A1</a>	LG CHEMICAL LTD	Cathode material for lithium secondary battery, and cathode and lithium secondary battery each comprising same
<a href="#">WO 2020129274 A1</a>	AWA PAPER & TECH COMPANY INC	Power source device and thermal insulation sheet for power source device
<a href="#">WO 2020069410 A1</a>	CPS TECH HOLDINGS LLC	Mounting clip for printed circuit board
<a href="#">WO 2020129881 A1</a>	SANYO ELECTRIC CO	Rectangular secondary battery
<a href="#">WO 2020071469 A1</a>	MURATA MANUFACTURING CO	Electrolyte solution for lithium ion secondary batteries, and lithium ion secondary battery
<a href="#">WO 2020122474 A1</a>	LG CHEMICAL LTD	Battery cell storage case and storage device including same
<a href="#">WO 2020066060 A1</a>	VEHICLE ENERGY JAPAN INC	Battery pack
<a href="#">WO 2020065709 A1</a>	HONDA MOTOR CO LTD	Battery module
<a href="#">WO 2020128743 A1</a>	SEMICONDUCTOR ENERGY LAB	Semiconductor device and battery pack
<a href="#">WO 2020129880 A1</a>	SANYO ELECTRIC CO	Secondary battery and manufacturing method therefor
<a href="#">WO 2020066253 A1</a>	PANASONIC IP MAN CO LTD	Lithium secondary battery
<a href="#">WO 2020122511 A1</a>	LG CHEMICAL LTD	Secondary battery cathode, manufacturing method therefor, and lithium secondary battery including same
<a href="#">WO 2020083946 A1</a>	ELRINGKLINGER AG	Battery temperature regulation device, vehicle, and method for producing a battery temperature regulation device
<a href="#">WO 2020084211 A1</a>	PSA AUTOMOBILES SA	Method for determining the state of charge and state of ageing of an electrochemical battery as a function of a mapping of the open circuit voltage
<a href="#">WO 2020104136 A1</a>	BOSCH GMBH ROBERT	Laminar current collector
<a href="#">WO 2020118108 A1</a>	HONDA MOTOR CO LTD	Solid electrolyte interphase (SEI) application on anode of fluoride ion/shuttle batteries

<a href="#">WO 2020115727 A1</a>	TERAWATT TECH INC	Anode-free solid-state battery cells with anti-dendrite and interface adhesion controlled functional layers
<a href="#">WO 2020063882 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Non-aqueous electrolyte, lithium-ion battery, battery module, battery pack, and device
<a href="#">WO 2020083874 A1</a>	BOSCH GMBH ROBERT	Battery system for an electric vehicle, method for operating a battery system, and electric vehicle
<a href="#">WO 2020106024 A1</a>	LG CHEMICAL LTD	Positive electrode active material for lithium secondary battery and preparation method therefor
<a href="#">WO 2020108988 A1</a>	COVESTRO DEUTSCHLAND AG	Integrated cooling element for a battery module
<a href="#">WO 2020121044 A1</a>	DO FLUORIDE JIAOZUO NEW ENERGY TECH CO LTD	Electrode assembly unit, manufacturing method and battery cell
<a href="#">WO 2020098783 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery
<a href="#">WO 2020084363 A1</a>	ITALDESIGN GIUGIARO SPA	Electric or hybrid motor-vehicle with cooling system for cooling removable battery modules
<a href="#">WO 2020084210 A1</a>	PSA AUTOMOBILES SA	Method for estimating the open-circuit voltage of an electrochemical accumulator of a battery system
<a href="#">WO 2020109102 A1</a>	BOSCH GMBH ROBERT	Battery cell, battery module and use thereof
<a href="#">WO 2020121288 A1</a>	TERAWATT TECH INC	Prelithiated anode in battery cells for electric vehicles
<a href="#">WO 2020121244 A1</a>	3M INNOVATIVE PROPERTIES CO	Electric vehicle battery cold plate assemblies
<a href="#">WO 2020078649 A1</a>	BAYERISCHE MOTOREN WERKE AG	Protective unit for a battery module of a high-voltage battery, battery module, and high-voltage battery
<a href="#">WO 2020080919 A1</a>	LG CHEMICAL LTD	Flexible secondary battery packaging, and flexible secondary battery comprising same
<a href="#">WO 2020079965 A1</a>	HITACHI LTD	Battery pack
<a href="#">WO 2020127752 A1</a>	VOLKSWAGEN AG	Method for monitoring a battery
<a href="#">WO 2020063885 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Non-aqueous electrolyte, lithium ion battery, battery module, battery pack and apparatus
<a href="#">WO 2020092267 A1</a>	ENEVATE CORP	Silicon-based energy storage devices with phosphorus containing electrolyte additives
<a href="#">WO 2020116580 A1</a>	HITACHI CHEMICAL CO LTD	Electrolyte and electrochemical device
<a href="#">WO 2020129491 A1</a>	DENSO CORP	Battery heating device
<a href="#">WO 2020063889 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Non-aqueous electrolyte, lithium ion battery, battery module, battery pack and device
<a href="#">WO 2020067830 A1</a>	LG CHEMICAL LTD	Positive electrode active material for secondary battery, method for producing same, and lithium secondary battery comprising same
<a href="#">WO 2020080800 A1</a>	LG CHEMICAL LTD	Method for preparing cathode additive for lithium secondary battery, and cathode additive for lithium secondary battery, prepared thereby
<a href="#">WO 2020098778 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery
<a href="#">WO 2020108877 A1</a>	BAYERISCHE MOTOREN WERKE AG	High-voltage battery comprising a temperature control device, and vehicle
<a href="#">WO 2020123658 A1</a>	CHONGQING JINKANG NEW ENERGY AUTOMOBILE CO LTD	Hydraulic isotropically-pressurized battery modules
<a href="#">WO 2020088872 A1</a>	BAYERISCHE MOTOREN WERKE AG	System for a drive energy store of a hybrid or electric vehicle, and method for charging a drive energy store of a hybrid or electric vehicle
<a href="#">WO 2020105303 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Cell-controller, battery controller, battery management system, and battery system
<a href="#">WO 2020115253 A2</a>	VALEO SYSTEMES THERMIQUES	Modular collector tube and battery cooler comprising modular collector tube
<a href="#">WO 2020124086 A1</a>	CUBERG INC	System for an ionic liquid-based electrolyte for high energy battery
<a href="#">WO 2020080900 A1</a>	LG CHEMICAL LTD	Anode active material, anode including anode active material, secondary battery including anode, and method for preparing anode active material
<a href="#">WO 2020084212 A1</a>	PSA AUTOMOBILES SA	Method for determining the state of ageing of an electrochemical battery

<a href="#">WO 2020098743 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery
<a href="#">WO 2020063740 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive pole piece, and lithium ion battery, battery module, battery pack and device using positive pole piece
<a href="#">WO 2020085011 A1</a>	VEHICLE ENERGY JAPAN INC	Battery control device
<a href="#">WO 2020116936 A1</a>	LG CHEMICAL LTD	Battery module comprising connector having bidirectional fastening structure
<a href="#">WO 2020063680 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode active material and preparation method thereof, electrochemical cell, battery module, battery pack, and apparatus
<a href="#">WO 2020090486 A1</a>	PANASONIC IP MAN CO LTD	Energy transfer circuit and power storage system
<a href="#">WO 2020106021 A1</a>	LG CHEMICAL LTD	Battery pack
<a href="#">WO 2020085097 A1</a>	VEHICLE ENERGY JAPAN INC	Battery control device
<a href="#">WO 2020095323 A1</a>	TVS MOTOR CO LTD	Heat dissipating structure
<a href="#">WO 2020100066 A1</a>	3M INNOVATIVE PROPERTIES CO	Flame-resistant nonwoven fabric
<a href="#">WO 2020098768 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery
<a href="#">WO 2020107507 A1</a>	RISESUN MENGGULI NEW ENERGY SCIENCE & TECH CO LTD	Battery system with adjustable heating rate and control method thereof
<a href="#">WO 2020090429 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Parameter estimation system, parameter estimation device, vehicle, computer program, and parameter estimation method
<a href="#">WO 2020091532 A1</a>	LG CHEMICAL LTD	Method for producing solid-state battery
<a href="#">WO 2020090304 A1</a>	PANASONIC IP MAN CO LTD	Battery management system and battery management method
<a href="#">WO 2020091345 A1</a>	LG CHEMICAL LTD	Anode active material and lithium secondary battery comprising same
<a href="#">WO 2020088484 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrolytic solution, lithium ion battery, battery module, battery pack and device
<a href="#">WO 2020098765 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode sheet and electrochemical device
<a href="#">WO 2020063888 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Non-aqueous electrolyte, lithium-ion battery, battery module, battery pack and device
<a href="#">WO 2020085726 A1</a>	LG CHEMICAL LTD	Method for manufacturing electrode for lithium secondary battery and electrode for lithium secondary battery manufactured by using same
<a href="#">WO 2020088536 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lower case body, battery case, and vehicle
<a href="#">WO 2020090143 A1</a>	ENNET COMPANY LTD	Battery diagnosis device and battery diagnosis method using current pulse method
<a href="#">WO 2020090922 A1</a>	PANASONIC IP MAN CO LTD	Non-aqueous electrolyte secondary battery and non-aqueous electrolytic solution
<a href="#">WO 2020100067 A1</a>	3M INNOVATIVE PROPERTIES CO	Flame-resistant nonwoven fiber assembly
<a href="#">WO 2020102138 A1</a>	PUTNAM TODD	Quick battery disconnect system for high current circuits
<a href="#">WO 2020102155 A1</a>	BASERI EHSAN	High voltage laminated power distribution system with integrated fuses
<a href="#">WO 2020090175 A1</a>	TOYOTA JIDOSHOKKI KK	Nickel-metal hydride battery
<a href="#">WO 2020097322 A1</a>	MAXWELL LAB	Intermittently coated dry electrode for energy storage device and method of manufacturing the same
<a href="#">WO 2020102116 A1</a>	WYNN NATHANIEL C	Battery module with bimetallic terminal busbar and adaptable connector interface
<a href="#">WO 2020105980 A1</a>	LG CHEMICAL LTD	Lithium-sulfur secondary battery
<a href="#">WO 2020110976 A1</a>	SANYO ELECTRIC CO	Battery and manufacturing method thereof
<a href="#">WO 2020129645 A1</a>	DENSO CORP	Equipment temperature regulating device
<a href="#">WO 2020063887 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Non-aqueous electrolyte, lithium ion battery, battery module, battery pack and apparatus

<a href="#">WO 2020084386 A1</a>	SEMICONDUCTOR ENERGY LAB	Circuit for controlling charging of secondary cell, and system for detecting abnormalities in secondary cell
<a href="#">WO 2020109532 A1</a>	BOSCH GMBH ROBERT	Battery cell, method for heating a battery cell and battery module
<a href="#">WO 2020085731 A1</a>	LG CHEMICAL LTD	Cathode active material for secondary battery, manufacturing method therefor, and lithium secondary battery comprising same
<a href="#">WO 2020090678 A1</a>	GS YUASA INT LTD	Rechargeable battery with nonaqueous electrolyte, method for producing rechargeable battery with nonaqueous electrolyte, and method for using rechargeable battery with nonaqueous electrolyte
<a href="#">WO 2020091448 A1</a>	LG CHEMICAL LTD	Lithium secondary battery
<a href="#">WO 2020090014 A1</a>	ATTACCATO LLC	Non-aqueous electrolyte secondary battery and method for manufacturing non-electrolyte secondary battery
<a href="#">WO 2020105975 A1</a>	LG CHEMICAL LTD	Anode active material and lithium secondary battery comprising same
<a href="#">WO 2020126792 A1</a>	BOSCH GMBH ROBERT	Electrode unit for a battery cell, battery cell, and method for producing an electrode unit
<a href="#">WO 2020081221 A1</a>	ILLINOIS TOOL WORKS	Thermally conductive insulating sheet and method for preparing same
<a href="#">WO 2020085811 A1</a>	LG CHEMICAL LTD	Lithium-sulfur secondary battery
<a href="#">WO 2020084707 A1</a>	TOSHIBA KK	Battery and battery pack
<a href="#">WO 2020090828 A1</a>	KUREHA CORP	Gel electrolyte and nonaqueous electrolyte secondary battery
<a href="#">WO 2020095325 A1</a>	TVS MOTOR CO LTD	Interconnecting structure for energy storage cells in an energy storage device
<a href="#">WO 2020099261 A1</a>	SOLVAY SPECIALTY POLYMERS IT	Solid electrolyte composition
<a href="#">WO 2020104120 A1</a>	UNIV DEGLI STUDI G DANNUNZIO CHIETI PESCARA	Nanocomposite electrospun materials based on cu2o/carbon as anodes for lithium batteries
<a href="#">WO 2020132343 A1</a>	AMASTAN TECH INC	Plasma processing of lithium transition metal oxides for lithium ion batteries
<a href="#">WO 2020096212 A1</a>	POSCO	Lithium compound, nickel-based cathode active material, method for preparing lithium oxide, method for preparing nickel-based cathode active material, and secondary battery using same
<a href="#">WO 2020097214 A1</a>	UNIV PENNSYLVANIA	Healing and morphogenesis of structural metal foams and other matrix materials
<a href="#">WO 2020102092 A1</a>	ONEIL KYLE	Distribution system for unswitched high voltage power
<a href="#">WO 2020098769 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode sheet and electrochemical apparatus
<a href="#">WO 2020111665 A1</a>	AMOGREENTECH CO LTD	Pouch type battery cartridge and pouch type battery pack comprising same
<a href="#">WO 2020111245 A1</a>	HONDA MOTOR CO LTD	Battery charging system, charging device, information processing device, battery charging method, program, and storage medium
<a href="#">WO 2020111275 A1</a>	PANASONIC IP MAN CO LTD	Battery
<a href="#">WO 2020111899 A1</a>	LG CHEMICAL LTD	Switch control device and method
<a href="#">WO 2020110888 A1</a>	PANASONIC IP MAN CO LTD	Battery
<a href="#">WO 2020074397 A1</a>	RENAULT SAS	Method and device for controlling the level of charge of a traction battery of an electric vehicle
<a href="#">WO 2020088965 A1</a>	BOSCH GMBH ROBERT	Electrode, battery cell and use thereof
<a href="#">WO 2020102104 A1</a>	WYNN NATHANIEL C	Battery module with actively cooled high power electrical interface
<a href="#">WO 2020098788 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive pole piece and electrochemical apparatus
<a href="#">WO 2020102496 A1</a>	RIVIAN IP HOLDINGS LLC	Serpentine counter flow cold plate for a vehicle battery module
<a href="#">WO 2020116311 A1</a>	DENSO CORP	Battery system
<a href="#">WO 2020098792 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode piece and electrochemical device
<a href="#">WO 2020110917 A1</a>	PANASONIC IP MAN CO LTD	Secondary battery and electrolyte solution
<a href="#">WO 2020116312 A1</a>	DENSO CORP	Battery system
<a href="#">WO 2020098789 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrochemical device
<a href="#">WO 2020106837 A1</a>	TPI COMPOSITES INC	A composite battery enclosure
<a href="#">WO 2020110260 A1</a>	TOSHIBA KK	Electrode, cell, and cell pack

<a href="#">WO 2020096253 A1</a>	LG CHEMICAL LTD	Positive electrode active material for lithium rechargeable battery, manufacturing method therefor and lithium rechargeable battery comprising same
<a href="#">WO 2020096287 A1</a>	LG CHEMICAL LTD	Binder composition for electrode of secondary battery, and electrode mixture
<a href="#">WO 2020096224 A1</a>	AMOGREENTECH CO LTD	Pouch-type battery cartridge and pouch-type battery pack comprising same
<a href="#">WO 2020098671 A1</a>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode plate and electrochemical device
<a href="#">WO 2020106042 A1</a>	LG CHEMICAL LTD	Battery management system, battery pack and electric vehicle
<a href="#">WO 2020110409 A1</a>	NIPPON MEKTRON KK	Battery-monitoring unit
<a href="#">WO 2020111404 A1</a>	UNIV HANYANG IND UNIV COOP FOUND	Method for manufacturing lithium-transition metal oxide using prussian blue analogue, lithium-transition metal oxide, and lithium secondary battery
<a href="#">WO 2020078935 A1</a>	BOSCH GMBH ROBERT	Battery cell with an integrated control circuit
<a href="#">WO 2020099991 A1</a>	SEMICONDUCTOR ENERGY LAB	Positive electrode active material, secondary battery, electronic device, and vehicle
<a href="#">WO 2020102236 A1</a>	SEKAR VIGNESH	Modular electric vehicle battery pack frame having extruded aluminum structural members
<a href="#">WO 2020111243 A1</a>	HONDA MOTOR CO LTD	Battery utilization system, storage device, battery utilization method, program, and storage medium
<a href="#">WO 2020086524 A1</a>	UNIV NORTHWESTERN	Calcium-metal alloy anode materials for reversible calcium-ion batteries
<a href="#">WO 2020094375 A1</a>	VOLKSWAGEN AG	Method for producing a cathode apparatus, method for producing an electrode assembly, and battery
<a href="#">WO 2020100071 A1</a>	3M INNOVATIVE PROPERTIES CO	Methods of identifying an overheating event in a battery cell single-phase immersion cooling system
<a href="#">WO 2020100683 A1</a>	MURATA MANUFACTURING CO	Solid battery
<a href="#">WO 2020112753 A1</a>	RENSSELAER POLYTECH INST	Printing nanoporous ultrathin membranes for lithium-sulfur batteries
<a href="#">WO 2020111564 A1</a>	LG CHEMICAL LTD	Battery module having improved heat dissipation, battery pack comprising battery module and vehicle comprising battery pack
<a href="#">WO 2020100456 A1</a>	JAPAN METALS AND CHEMICALS CO LTD	Hydrogen storage alloy for alkaline battery, and alkaline battery using the same
<a href="#">WO 2020102235 A1</a>	INNO TM USA INC	Smart battery pack
<a href="#">WO 2020111446 A1</a>	POSCO	Anode active material for lithium secondary battery, method for preparing same, and lithium secondary battery comprising same
<a href="#">WO 2020089152 A1</a>	BOSCH GMBH ROBERT	Heating or cooling medium circuit for an electric vehicle
<a href="#">WO 2020111550 A1</a>	LG CHEMICAL LTD	Battery module having improved heat dissipation, battery pack comprising said battery module, and vehicle comprising said battery pack
<a href="#">WO 2020111649 A1</a>	LG CHEMICAL LTD	Cathode for lithium secondary battery and lithium secondary battery including same
<a href="#">WO 2020086946 A1</a>	PREMERGY INC	Multiple chemistry battery systems for electric vehicles
<a href="#">WO 2020100620 A1</a>	VEHICLE ENERGY JAPAN INC	Lithium ion secondary battery and method for manufacturing same
<a href="#">WO 2020101331 A1</a>	IUCF HYU	Cathode active material and lithium secondary battery comprising same
<a href="#">WO 2020111898 A1</a>	LG CHEMICAL LTD	Method for producing positive electrode active material precursor for lithium secondary battery
<a href="#">WO 2020102547 A1</a>	MADDEN THOMAS H	Bipolar aqueous intercalation battery stack and associated system and methods
<a href="#">WO 2020096786 A2</a>	CUMMINS INC	Waste heat recovery power electronics cooling
<a href="#">WO 2020109711 A2</a>	BLUE SOLUTIONS	Polymer electrolyte for a lithium metal polymer battery having improved performance
<a href="#">WO 2020089937 A1</a>	TVS MOTOR CO LTD	Holder structure for energy storage cells in an energy storage device

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## SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2020128699 A1</a>	SEMICONDUCTOR ENERGY LAB	Positive electrode active material and secondary battery
<a href="#">WO 2020090409 A1</a>	SANYO ELECTRIC CO	Rectangular electricity storage device

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## SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2020105786 A1</a>	KOREA ELECTRO TECH RESEARCH INSTITUTE	Regenerative braking apparatus
<a href="#">WO 2020116272 A1</a>	HITACHI CONSTRUCTION MACH CO	Regenerative braking system and electrically driven work vehicle using same

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## MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2020074100 A1</a>	PIERBURG PUMP TECHNOLOGY GMBH	Electronically commutated electric motor
<a href="#">WO 2020129942 A1</a>	NIPPON STEEL CORP	Stacked core and rotary electric machine
<a href="#">WO 2020129935 A1</a>	NIPPON STEEL CORP	Laminated core and rotating machine
<a href="#">WO 2020129925 A1</a>	NIPPON STEEL CORP	Stator adhesive laminated core and rotating electric machine
<a href="#">WO 2020064954 A1</a>	SIEMENS AG	Electric machine and hybrid electric vehicle
<a href="#">WO 2020129938 A1</a>	NIPPON STEEL CORP	Laminated core, core block, rotating electric machine, and method of manufacturing core block
<a href="#">WO 2020129927 A1</a>	NIPPON STEEL CORP	Stator adhesive laminated core, method for manufacturing same, and rotating electric machine
<a href="#">WO 2020129929 A1</a>	NIPPON STEEL CORP	Stator adhesive laminated core and rotating electrical machine
<a href="#">WO 2020129926 A1</a>	NIPPON STEEL CORP	Laminated core and rotating electric machine
<a href="#">WO 2020129940 A1</a>	NIPPON STEEL CORP	Laminated core and rotating electric machine
<a href="#">WO 2020129937 A1</a>	NIPPON STEEL CORP	Laminated core and rotating electric machine
<a href="#">WO 2020129928 A1</a>	NIPPON STEEL CORP	Laminated core and rotating electric machine
<a href="#">WO 2020075334 A1</a>	SOU INC	Electric motor
<a href="#">WO 2020074660 A1</a>	VITESCO TECH GMBH	Electric motor, brake system, and vehicle
<a href="#">WO 2020067280 A1</a>	NIDEC CORP	Motor unit
<a href="#">WO 2020067216 A1</a>	NIDEC SERVO CORP	Motor device
<a href="#">WO 2020119897 A1</a>	BAYERISCHE MOTOREN WERKE AG	Cap assembly for a battery cell having electronic safety functionality
<a href="#">WO 2020128175 A1</a>	PSA AUTOMOBILES SA	Electrical machine with overmoulding of phase coupling rings comprising functions
<a href="#">WO 2020073804 A1</a>	SHENZHEN SHANXIANG INTELLIGENT TECH ENTERPRISE LIMITED PARTNERSHIP	Directional silicon steel sheet axial magnetic field electric motor
<a href="#">WO 2020103954 A1</a>	UNIV OF SHANGHAI FOR SCIENCE AND TECHNOLOGY	Permanent magnet direct-current motor driving apparatus and electric equipment
<a href="#">WO 2020090365 A1</a>	DENSO CORP	Rotating electric machine
<a href="#">WO 2020111291 A1</a>	UNIV JEONJU IND UNIV COOP	Brushless dc motor core having aluminum metal composite applied thereto
<a href="#">WO 2020085003 A1</a>	TOYOTA JIDOSHOKKI KK	Hybrid system, hybrid system control device, and hybrid system control method
<a href="#">WO 2020085213 A1</a>	SONY CORP	In-wheel motor and powered wheel
<a href="#">WO 2020092400 A2</a>	RIMHURST INC	Rapid hill hold auto-balance apparatus and method for vehicles propelled by magnetic synchronous motors
<a href="#">WO 2020098867 A1</a>	KIEKERT AG	Bearing for fastening a component in a motor vehicle
<a href="#">WO 2020109832 A1</a>	NISSAN MOTOR	Electric motor unit
<a href="#">WO 2020109553 A1</a>	NIDEC GPM GMBH	Screw pump for cooling battery packs
<a href="#">WO 2020099090 A1</a>	BAYERISCHE MOTOREN WERKE AG	Compressor for an intake section of an internal combustion engine of a motor vehicle, internal combustion engine for a motor vehicle, and motor vehicle
<a href="#">WO 2020110878 A1</a>	NTN TOYO BEARING CO LTD	In-wheel motor drive device
<a href="#">WO 2020092570 A1</a>	UNIV NORTH CAROLINA STATE	Torque density and efficiency improvement in AC machines
<a href="#">WO 2020110886 A1</a>	DENSO CORP	Power transmission device for vehicle

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## CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2020069071 A1</a>	UNIV WAYNE STATE	A three-phase double t-type four-level rectifier
<a href="#">WO 2020067277 A1</a>	NIDEC CORP	Motor unit
<a href="#">WO 2020129376 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Power conversion device, multilayer substrate constituting same, and vehicle equipped with power conversion device
<a href="#">WO 2020065720 A1</a>	MITSUBISHI ELECTRIC CORP	AC rotating electric machine control device
<a href="#">WO 2020096655 A1</a>	HUAWEI TECH CO LTD	Bidirectional multiple-port power conversion system and method
<a href="#">WO 2020078967 A1</a>	MAHLE INT GMBH	Inverter device having a half bridge module
<a href="#">WO 2020114649 A1</a>	BOSCH GMBH ROBERT	Bidirectional DC/DC converter and method for operating the dc/dc converter
<a href="#">WO 2020109083 A1</a>	RENAULT SAS	Electromagnetic assembly for a resonant converter
<a href="#">WO 2020120312 A1</a>	BOSCH GMBH ROBERT	Discharging an inverter intermediate circuit capacitor by means of bridge short-circuit pulses
<a href="#">WO 2020066113 A1</a>	HITACHI LTD	Power supply system
<a href="#">WO 2020066266 A1</a>	DENSO CORP	Driving device for rotary electric machine
<a href="#">WO 2020089419 A1</a>	PRODRIVE TECH B V	Electrical power converter
<a href="#">WO 2020066222 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	High-voltage filter and electric power converter
<a href="#">WO 2020071081 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Motor control device and electric vehicle system
<a href="#">WO 2020106324 A1</a>	HUAWEI TECH CO LTD	AC-DC 3-level conversion system with HF intermediate AC and two separate outputs
<a href="#">WO 2020084822 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Voltage supply system and power source constituting same
<a href="#">WO 2020098863 A1</a>	SCHAEFFLER TECHNOLOGIES AG	Motor control unit, drive unit and method for motor control
<a href="#">WO 2020090472 A1</a>	HONDA MOTOR CO LTD	Reactor and multiple-phase interleave-type DC-DC converter
<a href="#">WO 2020090925 A1</a>	ROHM CO LTD	Semiconductor unit, semiconductor device, battery unit, and vehicle
<a href="#">WO 2020090220 A1</a>	DENSO CORP	Driving device for rotary electrical machine
<a href="#">WO 2020126554 A1</a>	BOSCH GMBH ROBERT	Direct-current voltage converter for bidirectional electrical power transmission from a primary side to a secondary side of the direct-current voltage converter or vice versa
<a href="#">WO 2020090279 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Drive system and control method
<a href="#">WO 2020090924 A1</a>	ROHM CO LTD	Semiconductor unit, battery unit, and vehicle
<a href="#">WO 2020088983 A1</a>	BOSCH GMBH ROBERT	Efficiency improvement for voltage transformers and consumers supplied therefrom
<a href="#">WO 2020127481 A1</a>	THYSSENKRUPP AG	Intermediate circuit discharge unit, electrical device and vehicle
<a href="#">WO 2020105407 A1</a>	HITACHI AUTOMOTIVE SYSTEMS LTD	Power semiconductor device
<a href="#">WO 2020099464 A1</a>	VITESCO TECH GMBH	Circuit carrier, (power) electronics assembly and electrical drive device
<a href="#">WO 2020101058 A1</a>	KUMKANG AUTOTEC CO LTD	Contactless power supply system
<a href="#">WO 2020105827 A1</a>	LG ELECTRONICS INC	Motive power device of electric vehicle
<a href="#">WO 2020100349 A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Driving device and driving method for semiconductor switch, power conversion device, and vehicle

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## RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2020129800 A1</a>	TOYOTA JIDOSHOKKI KK	In-vehicle charging device, vehicle exterior charging device, and charger control device
<a href="#">WO 2020066773 A1</a>	MITSUBISHI MOTORS CORP	Electric vehicle
<a href="#">WO 2020095213 A1</a>	ABB SCHWEIZ AG	System and method for electrical vehicle charging system
<a href="#">WO 2020095211 A1</a>	ABB SCHWEIZ AG	Systems and methods for underside charging of electrical vehicles
<a href="#">WO 2020083756 A1</a>	RENAULT SAS	Method for charging an accumulator battery through a charging terminal
<a href="#">WO 2020089305 A1</a>	PIAGGIO & C SPA	Device for powering and controlling an electric vehicle
<a href="#">WO 2020121339 A1</a>	LOG 9 MATERIALS SCIENT PRIVATE LIMITED	Dynamic multiplex switching system for charging and discharging of electric vehicles
<a href="#">WO 2020114795 A1</a>	RENAULT SAS	Method for optimised management of the charge of a fleet of electric vehicles
<a href="#">WO 2020095214 A1</a>	ABB SCHWEIZ AG	System and method for automatic connector coupling for an electric vehicle
<a href="#">WO 2020074383 A1</a>	THYSSENKRUPP AG	Charging device and electric drive system comprising a charging device of said type
<a href="#">WO 2020079463 A1</a>	NISSAN MOTOR	Control method and control device for hybrid vehicle
<a href="#">WO 2020095212 A1</a>	ABB SCHWEIZ AG	Self-cleaning electrical connector having pins with insulated ends
<a href="#">WO 2020074390 A2</a>	THYSSENKRUPP AG	Rapid charging device and electric drive system comprising a rapid charging device of said type
<a href="#">WO 2020098935 A1</a>	VESTEL ELEKTRONIK SANAYI VE TICARET A S	Electric vehicle and method of forming a charging chain of electric vehicles
<a href="#">WO 2020091586 A1</a>	SEERAUBER AUTOMOTIVE DE MEXICO S A P I DE C V	Lithium-ion smart battery
<a href="#">WO 2020117113 A1</a>	SCANIA CV AB	Battery pack comprising thermal management system for generating vibration
<a href="#">WO 2020099133 A1</a>	BOSCH GMBH ROBERT	Method for operating an electric vehicle
<a href="#">WO 2020074953 A2</a>	KWAPISZ JAKUB	Systems, methods, processes, and devices for delivering renewable energy to electric vehicles using an uncrewed battery-recharging vehicle
<a href="#">WO 2020111242 A1</a>	HONDA MOTOR CO LTD	Battery use system, charging device, information processing device, battery use method, program, and storage medium
<a href="#">WO 2020110508 A1</a>	SANDEN AUTOMOTIVE CLIMATE SYSTEMS CORP	Vehicle battery temperature adjustment apparatus and vehicle air-conditioner equipped with same

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## CAMBIO DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2020064003 A1</a>	AULTON NEW ENERGY AUTOMOTIVE TECH GROUP	Battery replacement locating system and method for electric car
<a href="#">WO 2020089935 A1</a>	ANNAM JANAKIRAM	System and method for battery exchange using autonomous mobile robots

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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**



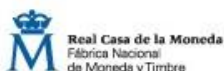
Los ITPs\*\* de la OEPM detectaron solicitudes de patente relevantes cuando estábamos a mitad del proyecto y gracias a ello pudimos reconducir nuestra investigación.



**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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