

Boletín VT

COCHE ELÉCTRICO

2º trimestre 2022

50

Vigilancia Tecnológica



Noticias

El 7 de abril supimos que El Ministerio para la Transición Ecológica y el Reto Demográfico (MITECO) va a destinar un [presupuesto adicional de 125 millones de euros al Programa de Incentivos a la Movilidad Eficiente y Sostenible \(MOVES III\)](#), para el impulso de la movilidad eléctrica en Cataluña, la Comunidad de Madrid, Castilla y León e Islas Baleares.

El 14 de mayo se publicó en el BOE la Orden ICT/426/2022, de 13 de mayo, en la que se amplía por segunda vez, el [plazo para solicitar las ayudas contempladas en el Proyecto Estratégico para la Recuperación y Transformación Económica del Vehículo Eléctrico y Conectado \(PERTE VEC\)](#), desplazando la fecha límite al 3 de junio.

El 9 de junio la Ministra Reyes Maroto avanzó los [resultados de la convocatoria del PERTE VEC](#). Se han recibido solicitudes de 13 proyectos tractores por valor de 5.927 millones euros de inversión subvencionable, conformados por 487 proyectos primarios que involucran a 327 empresas.

Las pymes representan el 55,7% de las entidades participantes, seguido de las grandes empresas que representan 38,8%. El 5,5% lo conforman Universidades públicas, centros tecnológicos de ámbito estatal y entidades sin ánimo de lucro, entre otros.

Los proyectos se distribuyen geográficamente por todo el territorio peninsular. Por número de proyectos presentados destacan Cataluña con 89 y la Comunidad Valencia con 82, seguida del País Vasco con 39, mientras que, por inversión

movilizada, la Comunidad Valenciana se sitúa en primer lugar, seguida de Cataluña y Extremadura.

El Consejo de Ministros aprobó el 14 de junio el [Real Decreto de modificación del Código Técnico de la Edificación \(CTE\)](#) para facilitar el despliegue de la infraestructura de recarga para el impulso del vehículo eléctrico en España.

En él se fija la dotación mínima de infraestructura de recarga de vehículos eléctricos con la que deben contar los edificios nuevos y las intervenciones en edificios existentes de determinada entidad:

- Para los edificios de uso residencial privado, con más de 20 plazas de aparcamiento, este Real Decreto exige canalizaciones que sirvan como preinstalación de las infraestructuras de recarga para el 100% de las plazas de aparcamiento.
- Para los edificios de usos distintos al residencial privado, con más de 10 plazas de aparcamiento, la norma exige canalizaciones que sirvan como preinstalación de las infraestructuras de recarga para el 20% de las plazas de aparcamiento, así como la instalación de un punto de recarga cada 40 plazas o fracción. La exigencia de puntos de recarga se eleva a un punto de recarga cada 20 plazas o fracción para los edificios que pertenezcan a la Administración General de Estado.

[BOLETINES OEPM](#)

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
WO 2022130450 A1	TOSHIBA KK	Battery
WO 2022106221 A1	BAYERISCHE MOTOREN WERKE AG	Cathode active material, and lithium ion battery comprising said cathode active material
WO 2022108080 A1	LG ENERGY SOLUTION LTD	Secondary battery and manufacturing method for same
WO 2022106120 A1	BAYERISCHE MOTOREN WERKE AG	Method for producing a lithium-ion battery cell, and lithium-ion battery cell
WO 2022074051 A1	SMART BATTERY SOLUTIONS GMBH	Smart electrical connector for exchangeable battery units of an electrically operated vehicle
WO 2022107740 A1	NISSAN CHEMICAL CORP	Secondary battery electrode additive
WO 2022130275 A1	UFI INNOVATION CENTER S R L	Thermal regulation device
WO 2022074016 A1	RENAULT SAS	Cooling system
WO 2022074431 A1	H55 SA	Battery module for electrically-driven aircraft
WO 2022101780 A1	INVISTA TEXTILES UK LTD	Hybrid cooling plate for modular array
WO 2022118443 A1	SHOWA DENKO MAT CO LTD	Electrolyte and dual ion battery
WO 2022107428 A1	NIDEC CORP	Temperature regulator
WO 2022074282 A1	TURUN AMMATTIKORKEAKOULU OY	Battery lid and battery assembly
WO 2022073677 A1	BAYERISCHE MOTOREN WERKE AG	Battery cell having a plurality of electrode units in a common battery cell housing
WO 2022076207 A1	EXXONMOBIL CHEMICAL PATENTS INC	Heat transfer fluids comprising isomeric branched paraffin dimers derived from linear alpha olefins and use thereof
WO 2022074369 A1	KING S COLLEGE LONDON	Method of forming an electrode
WO 2022123634 A1	HONDA MOTOR CO LTD	Management system
WO 2022131262 A1	SHOWA DENKO MAT CO LTD	Lithium-ion secondary-battery negative electrode material and method for manufacturing same, lithium-ion secondary-battery negative electrode, and lithium ion secondary battery
WO 2022111964 A1	BAYERISCHE MOTOREN WERKE AG	Method for contacting components in electric systems in a bonded manner, energy storage unit, and use of the energy of an energy storage unit
WO 2022130092 A1	SEMICONDUCTOR ENERGY LAB	Secondary battery and monitoring system for secondary battery
WO 2022126634 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly and manufacturing method and manufacturing system therefor, battery cell, battery and electrical device
WO 2022105696 A1	SONGSHAN LAKE MAT LAB	Positive electrode active material precursor and preparation method therefor, positive electrode active material and preparation method therefor, positive electrode of lithium ion secondary battery, and lithium ion secondary battery
WO 2022133019 A1	PHILLIPS 66 CO	In situ electrolyte additives for batteries
WO 2022118640 A1	OTSUKA CHEMICAL CO LTD	Titanic acid-based solid electrolyte material
WO 2022132897 A1	THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS	Coated nickel-rich layered oxide electrodes and applications thereof
WO 2022126906 A1	GUANGZHOU AUTOMOBILE GROUP CO	Method and system for optimizing battery management system model, and storage medium and electric vehicle
WO 2022074329 A1	COMMISSARIAT ENERGIE ATOMIQUE	Method for discharging an electrochemical generator
WO 2022087358 A1	SILA NANOTECHNOLOGIES INC	Surface coated porous substrates and particles and systems and methods thereof



WO 2022092700 A1	LG ENERGY SOLUTION LTD	Lithium-sulfur secondary battery comprising electrolyte containing borate-based lithium salt
WO 2022098666 A1	UNIV NORTHERN ILLINOIS BOARD OF TRUSTEES	Doped sodium anode, battery having a doped sodium anode, and methods of use thereof
WO 2022105614 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium metal negative electrode, preparation method therefor and related lithium metal battery thereof, and device
WO 2022087830 A1	NINGDE AMPEREX TECHNOLOGY LTD	Electrolyte and electrochemical device and electronic device comprising same
WO 2022096278 A1	VALEO SYSTEMES THERMIQUES	Temperature control device, in particular a cooling device for a motor vehicle
WO 2022102961 A1	SAMSUNG ELECTRONICS CO LTD	Cathode active material, cathode and lithium secondary battery comprising same, and preparation method thereof
WO 2022103213 A1	LG ENERGY SOLUTION LTD	Battery diagnostic device and battery diagnostic method
WO 2022107383 A1	NIDEC CORP	Temperature regulating device
WO 2022120026 A1	SION POWER CORP	Low porosity electrodes and related methods
WO 2022124700 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising battery pack
WO 2022070312 A1	SHOWA DENKO MAT CO LTD	Electrolyte solution and electrochemical device
WO 2022101974 A1	SHOWA DENKO MAT CO LTD	Electrode group for battery, storage battery, battery pack, electric vehicle, and manufacturing method for electrode group for battery
WO 2022102910 A1	LG ENERGY SOLUTION LTD	Battery pack having circuit board and electrode lead bonded directly to each other by laser welding method
WO 2022118928 A1	MAXELL LTD	All-solid-state battery system
WO 2022120210 A1	NEPTUNE SCOOTERS	Manufacturing a battery pack using a welding jig
WO 2022124370 A1	GS YUASA INT LTD	Solid electrolyte, method for manufacturing solid electrolyte, power storage element, electronic device, and automobile
WO 2022069811 A1	PSA AUTOMOBILES SA	Vehicle battery voltage management method
WO 2022103101 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2022107429 A1	NIDEC CORP	Temperature regulator
WO 2022124660 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack including same
WO 2022092302 A1	ASAHI CHEMICAL IND	Siloxane dispersed crosslinked separator
WO 2022103105 A1	LG ENERGY SOLUTION LTD	Cathode active material for lithium secondary battery, method for manufacturing same, and lithium secondary battery comprising same
WO 2022119524 A1	CETKIN ERDAL	A battery pack with thermal management system
WO 2022069838 A1	HUTCHINSON	Method for recycling a lithium ion battery electrode, precursor mixture and electrode composition for said battery
WO 2022096995 A1	3M INNOVATIVE PROPERTIES CO	Fluids for immersion cooling of electronic components
WO 2022094992 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrical device, method for preparing electrical device, and apparatus for preparing electrical device
WO 2022100280 A1	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP LTD	Composite current collector, composite pole piece, battery, and electronic device
WO 2022108291 A1	LG ENERGY SOLUTION LTD	Battery pack including structure for suppressing thermal diffusion
WO 2022118721 A1	CANON KK	Active material particles, positive electrode, secondary battery, and method for producing active material particles
WO 2022074999 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022081375 A1	COVESTRO LLC	A modular battery pack
WO 2022102792 A1	MURATA MANUFACTURING CO	Solid-state battery
WO 2022103184 A1	LG CHEMICAL LTD	Separator for lithium secondary battery, and method for manufacturing same
WO 2022103231 A1	LG ENERGY SOLUTION LTD	Battery cell cooling device, battery pack including same, and method for cooling battery cell by using same
WO 2022107384 A1	NIDEC CORP	Temperature regulating device
WO 2022115976 A1	GEELY HOLDING GROUP CO LTD	Method and apparatus for controlling heat pump air-conditioning system of traveling vehicle, and device and storage medium

WO 2022069277 A1	RENAULT SAS	Dynamic system for balancing charging voltage for battery modules
WO 2022075618 A1	LG ENERGY SOLUTION LTD	Battery device and method for predicting battery output
WO 2022076280 A1	UNIV NORTHWESTERN	Composites with surface refining and conformal graphene coating, electrodes, and fabricating methods of same
WO 2022103112 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2022124584 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack including same
WO 2022075655 A1	SAMSUNG ELECTRONICS CO LTD	Methods and systems for detecting faulty behavior in a battery
WO 2022103094 A1	LG ENERGY SOLUTION LTD	Positive electrode for lithium secondary battery, and lithium secondary battery
WO 2022107826 A1	MURATA MANUFACTURING CO	Solid electrolyte ceramic and solid state battery
WO 2022108278 A1	LG ENERGY SOLUTION LTD	Air cooling type battery module having separate cooling structure for battery cell
WO 2022114929 A1	LG ENERGY SOLUTION LTD	Cathode active material, and cathode and lithium secondary battery comprising same
WO 2022124774 A1	LG ENERGY SOLUTION LTD	Positive electrode active material for lithium secondary battery, and lithium secondary battery comprising same
WO 2022090060 A1	BOSCH GMBH ROBERT	Lid module of a battery cell housing, method for production thereof, and use of such a lid module
WO 2022090348 A1	KAUTEX TEXTRON GMBH & CO KG	Battery shell, traction battery, motor vehicle, tool for producing a monolithic battery shell and method for producing a monolithic battery shell
WO 2022099247 A1	GLOBAL GRAPHENE GROUP INC	Lithium-protecting polymer layer for an anode-less lithium metal secondary battery and manufacturing method
WO 2022103211 A1	LG ENERGY SOLUTION LTD	Battery pack, vehicle, and electronic device
WO 2022107892 A1	MURATA MANUFACTURING CO	Secondary battery, secondary battery control system, and battery pack
WO 2022113969 A1	RICOH CO LTD	Liquid composition for electrode, storage container, electrode manufacturing device, method of manufacturing electrode, electrode, and electrochemical device
WO 2022117500 A1	H K O ISOLIER UND TEXTILTECHNIK GMBH	Multilayer protective element for a battery
WO 2022124213 A1	CANON KK	Solid-state secondary battery
WO 2022099623 A1	SCHAFFLER TECHNOLOGIES AG	Battery assembly
WO 2022106954 A1	SEMICONDUCTOR ENERGY LAB	Secondary battery, power storage system, vehicle, and positive electrode production method
WO 2022117080 A1	BYD CO LTD	Lithium ion battery and power vehicle
WO 2022084600 A1	ARKEMA FRANCE	Thermal regulation of a battery by immersion in a liquid composition
WO 2022120666 A1	MICROVAST POWER SYSTEMS CO LTD	Lithium ion secondary battery and electric vehicle
WO 2022100201 A1	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP LTD	Electrode plate, battery cell component, battery component, and electronic device
WO 2022107801 A1	MURATA MANUFACTURING CO	Solid electrolyte ceramic and solid-state battery
WO 2022083992 A1	BAYERISCHE MOTOREN WERKE AG	Production of a cell casing of a battery cell, and cell casing
WO 2022081325 A1	SION POWER CORP	Electrolytes for lithium batteries
WO 2022102994 A1	LG ENERGY SOLUTION LTD	Anode for all-solid-state battery and all-solid-state battery including same
WO 2022122394 A1	BOSCH GMBH ROBERT	Method for detecting an unstable state of a vehicle battery
WO 2022121487 A1	HUAWEI DIGITAL POWER TECH CO LTD	Battery module, battery pack, and vehicle
WO 2022071392 A1	FUJIFILM CORP	Inorganic solid electrolyte-containing composition, sheet for all-solid secondary battery, and all-solid secondary battery, and methods for manufacturing sheet for all-solid secondary battery and all-solid secondary battery
WO 2022097073 A1	EOCELL LTD	Nonaqueous electrolyte for lithium ion secondary battery, and lithium ion secondary battery containing the same
WO 2022097943 A1	LG ENERGY SOLUTION LTD	Air-cooled battery pack for electric vehicle

WO 2022098097 A1	LG ENERGY SOLUTION LTD	Coolant port assembly
WO 2022103130 A1	LG ENERGY SOLUTION LTD	Battery pack, electronic device, automobile, and battery management system module
WO 2022070892 A1	PANASONIC IP MAN CO LTD	Negative electrode active material for secondary batteries, and secondary battery
WO 2022080050 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022082397 A1	JIANGSU CONTEMPORARY AMPEREX TECH LTD	Battery, electric apparatus, and method and device for preparing battery
WO 2022085759 A1	TOYOTA MOTOR CO LTD	Method for producing electrode member
WO 2022097423 A1	DENSO CORP	Disconnection abnormality diagnosis device
WO 2022103104 A1	LG ENERGY SOLUTION LTD	Positive electrode for lithium secondary battery, and lithium secondary battery
WO 2022110142 A1	DONGGUAN POWERAMP TECH LIMITED	Battery and electric device
WO 2022071175 A1	PANASONIC IP MAN CO LTD	Nonaqueous electrolyte secondary battery
WO 2022071048 A1	GS YUASA INT LTD	Computer program, determining device, and determining method
WO 2022075646 A1	LG ENERGY SOLUTION LTD	Battery charging/discharging system including cooling unit enabling uniform flow rate distribution
WO 2022085733 A1	FUJIFILM CORP	Electrode composition, electrode sheet for all-solid-state secondary batteries, all-solid-state secondary battery, method for producing electrode sheet for all-solid-state secondary batteries, and method for producing all-solid-state secondary battery
WO 2022086103 A1	LG ENERGY SOLUTION LTD	Electrode for secondary battery, secondary battery including same, and electrode manufacturing method
WO 2022085318 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022092055 A1	MAXELL LTD	Negative electrode for all-solid-state secondary cell, and all-solid-state secondary cell
WO 2022090776 A1	VIDYASIRIMEDHI INSTITUTE OF SCIENCE AND TECH VISTEC	A lithium-ion battery and method for preparing the same
WO 2022092691 A1	LG ENERGY SOLUTION LTD	Electrolyte for lithium secondary battery, and lithium secondary battery comprising same
WO 2022070646 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2022085996 A1	LG ENERGY SOLUTION LTD	Battery management apparatus and method
WO 2022094793 A1	GAO FEIFEI	Battery pack for electric vehicle
WO 2022108411 A1	LG ENERGY SOLUTION LTD	Method for manufacturing lithium ion secondary battery
WO 2022109453 A1	PRINCETON NUENERGY INC	Systems and methods for lithium ion battery cathode material recovery, regeneration, and improvement
WO 2022114693 A1	LG ENERGY SOLUTION LTD	Electrolyte for lithium-sulfur battery and lithium-sulfur battery comprising same
WO 2022067812 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Blended positive electrode material, positive electrode sheet and preparation method therefor, battery, and device
WO 2022070850 A1	FUJIFILM CORP	Inorganic solid-state electrolyte-containing composition, sheet for all-solid-state secondary battery, all-solid-state secondary battery, method for producing sheet for all-solid-state secondary battery, and method for producing all-solid-state secondary battery
WO 2022085637 A1	FUJIFILM CORP	Inorganic solid electrolyte-containing composition, sheet for all-solid secondary battery, all-solid secondary battery, and methods for producing sheet for all-solid secondary battery and all-solid secondary battery
WO 2022094169 A1	ALLIANCE SUSTAINABLE ENERGY	Methods and devices for electrochemical re lithiation of lithium-ion batteries
WO 2022098136 A1	LG ENERGY SOLUTION LTD	Cathode active material for lithium secondary battery, manufacturing method therefor, and lithium secondary battery including same
WO 2022098027 A1	LG ENERGY SOLUTION LTD	Secondary battery module, and secondary battery pack and vehicle comprising same
WO 2022114873 A1	LG CHEMICAL LTD	Apparatus and method for managing battery
WO 2022071298 A1	GS YUASA INT LTD	Power storage element

WO 2022086289 A1	LG ENERGY SOLUTION LTD	Negative electrode and secondary battery comprising same
WO 2022092679 A1	LG ENERGY SOLUTION LTD	Electrode assembly and battery cell including same
WO 2022094891 A1	JIANGSU YANGKOU PORT CO LTD	Electric vehicle battery cooling structure
WO 2022115077 A1	YESILOVA HOLDING ANONIM SIRKETI	Battery box with graphene reinforced aluminum matrix composite heat conduction plates
WO 2022119220 A1	LG ENERGY SOLUTION LTD	Secondary battery and device comprising same
WO 2022069910 A1	RIMAC AUTOMOBILI D O O	Battery module and method for cooling the battery module
WO 2022098098 A1	LG ENERGY SOLUTION LTD	Electrode including active material layer in bilayer structure, manufacturing method therefor, and secondary battery comprising same
WO 2022108111 A1	LG ENERGY SOLUTION LTD	Battery diagnostic apparatus and method
WO 2022092800 A1	LG ENERGY SOLUTION LTD	Liquid electrolyte for lithium-sulfur secondary battery and lithium-sulfur secondary battery comprising same
WO 2022090843 A1	SEMICONDUCTOR ENERGY LAB	Secondary battery, electronic device and vehicle
WO 2022092480 A1	SAMSUNG SDI CO LTD	All solid-state battery
WO 2022094925 A1	TEXAS INSTRUMENTS INC	Battery cell monitor
WO 2022108274 A1	LG ENERGY SOLUTION LTD	Bms management device and method
WO 2022114826 A1	LG ENERGY SOLUTION LTD	Battery management device and method
WO 2022114872 A1	LG ENERGY SOLUTION LTD	Cathode active material for lithium secondary battery, preparation method therefor, and lithium secondary battery comprising same
WO 2022070213 A1	ENERJAZZ TECH SOLUTIONS PVT LTD	A battery architecture allowing reusability of components of a battery and recyclability of battery cells
WO 2022075710 A1	LG ENERGY SOLUTION LTD	Battery module, and battery pack and vehicle that include same
WO 2022085682 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022097967 A1	LG ENERGY SOLUTION LTD	Battery rack management apparatus
WO 2022098073 A1	LG ENERGY SOLUTION LTD	Secondary battery and device including same
WO 2022103227 A1	LG ENERGY SOLUTION LTD	Electrode assembly and secondary battery including same
WO 2022107255 A1	SHOWA DENKO MAT CO LTD	Lithium ion secondary battery and separation membrane
WO 2022108277 A1	LG ENERGY SOLUTION LTD	Electrolyte for lithium-sulfur battery and lithium-sulfur battery including same
WO 2022113855 A1	PANASONIC IP MAN CO LTD	Secondary battery
WO 2022071324 A1	PANASONIC IP MAN CO LTD	Secondary battery
WO 2022085891 A1	SAMSUNG ELECTRONICS CO LTD	Electrode active material, preparation method therefor, electrode comprising same, and secondary battery
WO 2022093668 A1	TEXAS INSTRUMENTS INC	Management of modular subsystems using variable length frame length
WO 2022092675 A1	LG ENERGY SOLUTION LTD	Battery rack and energy storage device comprising battery rack
WO 2022092710 A1	LG ENERGY SOLUTION LTD	Negative electrode active material for lithium secondary battery, negative electrode, and lithium secondary battery
WO 2022101531 A1	CAF POWER & AUTOMATION S L U	Electrical energy storage system
WO 2022102876 A1	INU RES & BUSINESS FOUNDATION	Electrolyte solution comprising pre-polymer electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2022103095 A1	NAT UNIV PUKYONG IND UNIV COOP FOUND	Composite electrode active material for lithium secondary battery, manufacturing method therefor, and lithium secondary battery comprising same
WO 2022114930 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolytic solution for lithium secondary battery and lithium secondary battery comprising same
WO 2022113782 A1	FURUKAWA CO LTD	Inorganic solid electrolyte material, solid electrolyte, solid electrolyte film, and lithium ion battery

WO 2022114651 A1	LG ENERGY SOLUTION LTD	Method for manufacturing cathode for lithium-sulfur battery
WO 2022071174 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2022074959 A1	AIST	Composite oxide with novel crystal structure, and all-solid-state lithium ion secondary battery using said composite oxide as solid electrolyte
WO 2022077120 A1	2555663 ONTARIO LTD	Lithium metal anode assemblies and an apparatus and method of making
WO 2022080042 A1	NIPPON STEEL CORP	Cell case of secondary battery and module
WO 2022082116 A1	UNIV CALIFORNIA	Stabilized electrolytes for low-temperature batteries
WO 2022082759 A1	ENVISION DYNAMICS TECH JIANGSU CO LTD	Sulphate compound and non-aqueous electrolyte and power storage device containing same
WO 2022092664 A1	LG ENERGY SOLUTION LTD	Electrode for secondary battery, secondary battery including same, and method for manufacturing electrode
WO 2022098135 A1	LG ENERGY SOLUTION LTD	Positive electrode active material for lithium secondary battery, and lithium secondary battery comprising same
WO 2022098012 A1	LG ENERGY SOLUTION LTD	Battery management method and battery system using same
WO 2022108288 A1	LG ENERGY SOLUTION LTD	Battery pack including structure for suppressing thermal diffusion
WO 2022113783 A1	FURUKAWA CO LTD	Sulfide inorganic solid electrolyte material, solid electrolyte, solid electrolyte film, and lithium ion battery
WO 2022072928 A1	NEXTECH BATTERIES INC	Battery cells including lithium-ion conducting solid electrolytes and methods of making thereof
WO 2022079967 A1	MURATA MANUFACTURING CO	Electrolyte for secondary battery, and secondary battery
WO 2022080699 A1	LG ENERGY SOLUTION LTD	Battery system thermal event detection method and battery system using same
WO 2022089160 A1	GREAT WALL MOTOR CO LTD	Control method and device for thermal runaway of battery pack, and storage medium and system
WO 2022092136 A1	PANASONIC IP MAN CO LTD	Non-aqueous electrolyte secondary battery
WO 2022091673 A1	GS YUASA INT LTD	Abnormality detection method, abnormality detection device, power storage device, and computer program
WO 2022097945 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery, and lithium secondary battery comprising same
WO 2022098002 A1	APRO CO LTD	Pressure activation device including degassing unit
WO 2022108118 A1	KOREA ELECTRONICS TECHNOLOGY	Method for producing sulfide-based solid electrolyte using ester-based organic solvent, and sulfide-based solid electrolyte and all-solid-state battery manufactured by said manufacturing method
WO 2022108027 A1	SAMSUNG ELECTRONICS CO LTD	Composite solid electrolyte for secondary battery, secondary battery comprising same, and method of preparing same
WO 2022113716 A1	MURATA MANUFACTURING CO	Method for manufacturing secondary battery
WO 2022067808 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, device, and battery fabrication method and fabrication apparatus
WO 2022093716 A1	ENEVATE CORP	Symmetrical or asymmetrical alkylsulfonyl imide or cyclic alkylene sulfonylimide salts as cathode additives, electrolyte additives, or si anode additives for si anode-based li-ion cells
WO 2022094893 A1	JIANGSU YANGKOU PORT CO LTD	Temperature management control system for power battery of electric vehicle
WO 2022114538 A1	LG ENERGY SOLUTION LTD	Method for manufacturing lithium secondary battery, and lithium secondary battery manufactured thereby
WO 2022119154 A1	LG ENERGY SOLUTION LTD	Battery pack and device including same
WO 2022086102 A1	LG ENERGY SOLUTION LTD	Electrode for secondary battery, secondary battery including same, and method for manufacturing electrode
WO 2022085458 A1	ZEON CORP	Binder composition for all-solid-state secondary batteries, slurry composition for all-solid-state secondary batteries, solid electrolyte-containing layer, and all-solid-state secondary battery
WO 2022091894 A1	PANASONIC IP MAN CO LTD	Computation system, charging plan creation program, and discharging plan creation program
WO 2022097715 A1	IDEMITSU KOSAN CO	Method for producing lithium hydroxide
WO 2022108290 A1	LG ENERGY SOLUTION LTD	Battery pack including structure for suppressing thermal diffusion
WO 2022114824 A1	LG ENERGY SOLUTION LTD	Cathode active material for lithium secondary battery, preparation method therefor, and lithium secondary battery comprising same

WO 2022114792 A1	LG ENERGY SOLUTION LTD	Cylindrical secondary battery
WO 2022072839 A1	NOHMS TECH INC	Lithium-ion battery electrolyte additive
WO 2022075730 A1	LG ENERGY SOLUTION LTD	Secondary battery and device including same
WO 2022093797 A1	ENEVATE CORP	Functional epoxides in catalyst-based electrolyte compositions for li-ion batteries
WO 2022098096 A1	LG ENERGY SOLUTION LTD	Battery diagnostic device and method
WO 2022114472 A1	LG ENERGY SOLUTION LTD	Battery module, and battery pack and vehicle comprising same
WO 2022119226 A1	LG ENERGY SOLUTION LTD	Pouch-type battery sealing device comprising position adjustment unit, and pouch-type battery sealing method using same
WO 2022074985 A1	DENSO CORP	Monitoring device for assembled battery
WO 2022080910 A1	LG ENERGY SOLUTION LTD	Negative electrode for secondary battery, and secondary battery comprising same
WO 2022075712 A1	LG ENERGY SOLUTION LTD	Battery pack, battery system, and pre-charge method
WO 2022085561 A1	MURATA MANUFACTURING CO	Secondary battery, electronic device, and power tool
WO 2022092214 A1	PANASONIC IP MAN CO LTD	Positive electrode for secondary battery, and secondary battery
WO 2022092588 A1	LG ENERGY SOLUTION LTD	Battery module, battery pack comprising same battery module, and vehicle comprising same battery pack
WO 2022097960 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2022102682 A1	AIST	Electrolyte solution for nonaqueous secondary batteries, nonaqueous secondary battery using same, and method for discharging nonaqueous secondary battery
WO 2022107276 A1	SHOWA DENKO MAT CO LTD	Electrode group, storage battery, battery pack, and electric-powered vehicle
WO 2022108285 A1	LG ENERGY SOLUTION LTD	Battery pack comprising structure for suppressing thermal diffusion
WO 2022071722 A1	LG ENERGY SOLUTION LTD	Lithium-sulfur battery having high energy density
WO 2022080809 A1	SAMSUNG SDI CO LTD	Positive electrode for lithium secondary battery, and lithium secondary battery including same
WO 2022080835 A1	LG ENERGY SOLUTION LTD	Battery diagnostic device and battery diagnostic method
WO 2022080838 A1	LG ENERGY SOLUTION LTD	Battery module, battery pack, and electric automobile
WO 2022080936 A1	LG ENERGY SOLUTION LTD	Battery pack and device including same
WO 2022085764 A1	ENVISION AESC JAPAN LTD	Battery module, battery device, and method for manufacturing battery module
WO 2022092827 A1	LG ENERGY SOLUTION LTD	Battery management device and method
WO 2022085997 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2022093717 A1	ENEVATE CORP	Boron-containing chemicals as cathode additives, si anode additives, electrolyte additives or separator modifiers for li-ion batteries
WO 2022085962 A1	LG ENERGY SOLUTION LTD	Battery monitoring device, battery monitoring method, battery pack and electric vehicle
WO 2022080766 A1	LG ENERGY SOLUTION LTD	Cathode slurry composition for lithium secondary battery, cathode, and lithium secondary battery comprising same
WO 2022089961 A1	KAUTEX TEXTRON GMBH & CO KG	Battery shell, traction battery, motor vehicle, tool for producing a battery shell and method for producing a battery shell
WO 2022072715 A1	GROUP14 TECH INC	Methods of passivation to control oxygen content and reactivity of silicon-carbon composite materials
WO 2022087709 A1	HPQ SILICON RESOURCES INC	Process for transforming silicon slag into high capacity anode material for lithium-ion batteries
WO 2022080692 A1	LG ENERGY SOLUTION LTD	Battery apparatus, battery management system, and method for diagnosing connection status
WO 2022080761 A1	LG ENERGY SOLUTION LTD	Battery pack and device including same
WO 2022092764 A1	LG CHEMICAL LTD	Battery device

WO 2022071775 A1	LG ENERGY SOLUTION LTD	Separator for lithium secondary battery, method for manufacturing same, and lithium secondary battery comprising same
WO 2022080669 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2022080745 A1	LG ENERGY SOLUTION LTD	Battery management device and method
WO 2022080836 A1	LG ENERGY SOLUTION LTD	Negative electrode for lithium ion secondary battery
WO 2022077058 A1	SENDAI HOLDINGS PTY LTD	Multi-chamber rechargeable zinc manganese dioxide battery
WO 2022092688 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery, and lithium secondary battery comprising same
WO 2022071704 A1	LG ENERGY SOLUTION LTD	Electrode
WO 2022075606 A1	E TESS CO LTD	Battery module
WO 2022080832 A1	LG ENERGY SOLUTION LTD	Apparatus for managing battery pack
WO 2022092475 A1	ECOPRO BM CO LTD	Cathode active material and lithium secondary battery comprising same
WO 2022080854 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2022080979 A1	LG ENERGY SOLUTION LTD	Negative electrode and method for manufacturing same
WO 2022080829 A1	LG CHEMICAL LTD	Battery device
WO 2022080906 A1	LG ENERGY SOLUTION LTD	Battery module and manufacturing method therefor
WO 2022080973 A1	LG ENERGY SOLUTION LTD	Activation protocol generating method, and activation method and device using same
WO 2022072313 A1	UNIV NORTHWESTERN	Heterostructure ionogel electrolytes, fabricating methods and applications of same
WO 2022080786 A1	LG ENERGY SOLUTION LTD	Negative electrode for lithium secondary battery, lithium secondary battery comprising same, and method for manufacturing lithium secondary battery
WO 2022080837 A1	LG ENERGY SOLUTION LTD	Battery diagnostic apparatus and method
WO 2022080918 A1	LG ENERGY SOLUTION LTD	Battery pack having improved cooling performance, and device comprising same
WO 2022071216 A1	ISUZU MOTORS LTD	Battery unit, and method for manufacturing battery unit
WO 2022104372 A1	POLESTAR PERFORMANCE AB	Resilient high-voltage systems
WO 2022070686 A1	GS YUASA INT LTD	Computer program, determination device, and determination method
WO 2022080763 A1	LG ENERGY SOLUTION LTD	Module strain estimation device and method
WO 2022085937 A1	LG ENERGY SOLUTION LTD	Battery pack, electronic device, and vehicle
WO 2022086075 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack including same
WO 2022092982 A1	LG ENERGY SOLUTION LTD	Negative electrode and secondary battery comprising same
WO 2022086097 A1	LG ENERGY SOLUTION LTD	Battery test device
WO 2022092954 A1	LG ENERGY SOLUTION LTD	Pouch-type battery cell comprising electrode lead capable of maintaining constant internal pressure, and battery pack comprising same
WO 2022097710 A1	APB CORP	Lithium ion battery manufacturing device and manufacturing method
WO 2022095041 A1	SZ DJI TECHNOLOGY CO LTD	Battery storage device
WO 2022085995 A1	LG ENERGY SOLUTION LTD	Method for manufacturing anode having inorganic coating layer formed thereon
WO 2022085954 A1	LG ENERGY SOLUTION LTD	Battery pack, electronic device and vehicle
WO 2022086247 A1	LG ENERGY SOLUTION LTD	Electrode powder for manufacturing dry electrode for secondary battery, preparation method therefor, method for manufacturing dry electrode using same, dry electrode, secondary battery comprising same, energy storage apparatus, and apparatus for manufacturing dry electrode

WO 2022097804 A1	KOREA INSTITUTE OF MAT SCIENCE	Composition for forming lithium secondary battery electrode, and lithium secondary battery comprising electrode formed therefrom
WO 2022097884 A1	LG ENERGY SOLUTION LTD	Method for assigning communication id and system providing same
WO 2022071734 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2022080908 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack including same
WO 2022086006 A1	POSCO	Battery case
WO 2022086141 A1	LG ENERGY SOLUTION LTD	Method for manufacturing electrode assembly and electrochemical device comprising the electrode assembly
WO 2022086076 A1	LG ENERGY SOLUTION LTD	Battery blocking unit and battery pack including same
WO 2022085969 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same

[...volver a CONTENIDO](#)

SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022130763 A1	TOYOTA JIDOSHOKKI KK	Power storage device
WO 2022099595 A1	UNIV GUILIN ELECTRONIC TECH	Composite silicon monoxide thin film, preparation method therefor and use thereof
WO 2022124371 A1	GS YUASA INT LTD	Sulfide solid electrolyte, method for selecting elements for sulfide solid electrolyte, method for manufacturing sulfide solid electrolyte, power storage element, electronic device, and automobile
WO 2022102591 A1	GS YUASA INT LTD	Non-aqueous electrolyte storage element, and non-aqueous electrolyte storage device
WO 2022112370 A2	UCL BUSINESS LTD	Oxide anode materials
WO 2022102286 A1	TOYOTA JIDOSHOKKI KK	Power storage module
WO 2022110849 A1	XIAMEN YAXON NETWORK CO LTD	Curve prediction-based electric vehicle energy management method, terminal device, and storage medium
WO 2022113913 A1	TOYOTA JIDOSHOKKI KK	Electricity storage device
WO 2022075822 A1	UNIV SANGMYUNG INDUSTRY ACADEMY COOPERATION FOUNDATION	Electric double-layer capacitor in which self-discharge is suppressed and manufacturing method therefor
WO 2022080083 A1	MAXELL LTD	Electrode active material for electrochemical element and method for producing same, electrode material for electrochemical element, electrode for electrochemical element, electrochemical element, and mobile object
WO 2022115059 A1	ISTANBUL UNIV CERRAHPASA REKTORLUGU OZEL KALEM	An electrode providing high energy and power density and supercapacitors containing the same
WO 2022087064 A1	SCHUMACHER ELECTRIC CORP	Battery booster
WO 2022113912 A1	TOYOTA JIDOSHOKKI KK	Power storage device
WO 2022110850 A1	XIAMEN YAXON NETWORK CO LTD	Terrain prediction-based power battery pack equalization method

[...volver a CONTENIDO](#)

SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022122323 A1	BOSCH GMBH ROBERT	Braking torque control device, brake system and method for controlling a braking torque
WO 2022133175 A1	CONS METCO INC	Vehicle electronic control unit and method
WO 2022075005 A1	TOYOTA JIDOSHOKKI KK	Brake control device for industrial vehicle
WO 2022071500 A1	ADVICS CO LTD	Braking control device

[...volver a CONTENIDO](#)

MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022105970 A1	CONTINENTAL TEVES AG & CO OHG	Drive unit having an electric motor
WO 2022105955 A1	SCHAEFFLER TECHNOLOGIES AG	Electric machine
WO 2022105954 A1	SCHAEFFLER TECHNOLOGIES AG	Electric machine
WO 2022117159 A1	BUHLER MOTOR GMBH	Stator of an electric motor, and process for manufacturing same
WO 2022128632 A1	VALEO SIEMENS EAUTOMOTIVE GERMANY GMBH	Method for impregnating rotor coils
WO 2022117217 A1	PIERBURG PUMP TECHNOLOGY GMBH	Claw-pole stator for an electric motor
WO 2022122086 A1	BROSE FAHRZEUGTEILE SE & CO KG WUERZBURG	Electric motor for a motor vehicle
WO 2022131007 A1	DENSO CORP	Cooling system
WO 2022117154 A1	KIEKERT AG	Electromotive drive unit for motor vehicle applications
WO 2022073551 A1	SCHAEFFLER TECHNOLOGIES AG	Axial flux machine
WO 2022112145 A1	RENAULT SAS	Device for powering an electric motor of a motor vehicle
WO 2022128563 A1	THYSSENKRUPP STEEL EUROPE AG	Weight-optimized rotor shaft, and process for manufacturing same
WO 2022109561 A1	ATIEVA INC	Patterns for balanced stator windings in electric motor
WO 2022109581 A1	BLUE VOLTA TECH INC	Powertrain for an electric vehicle comprising a scalable and manageable energy storage system
WO 2022127975 A1	SCHAEFFLER TECHNOLOGIES AG	Electric machine
WO 2022107574 A1	HITACHI ASTEMO LTD	Electric actuator and vehicle drum brake comprising same
WO 2022117265 A1	PRO MICRON GMBH	Status monitoring for a rotating element of a motor or work machine, more particularly for the rotor of an electric motor
WO 2022079942 A1	MITSUBISHI ELECTRIC CORP	Electric machine with combined axial- and radial-flux
WO 2022075317 A1	NTN TOYO BEARING CO LTD	Motor unit and electrical pump equipped with same
WO 2022096055 A1	SCHAEFFLER TECHNOLOGIES AG	Axial flux machine
WO 2022083975 A1	VALEO SYSTEMES THERMIQUES	Ventilation device for a motor vehicle cooling module
WO 2022069570 A1	VALEO SIEMENS EAUTOMOTIVE GERMANY GMBH	Discharge unit for an electric rotating machine
WO 2022107515 A1	TOSHIBA KK	Rotating electric machine rotor and rotating electric machine
WO 2022089980 A1	KAUTEX TEXTRON GMBH & CO KG	Battery shell, traction battery, motor vehicle, tool for producing a battery shell and method for producing a battery shell
WO 2022069503 A1	SIEMENS AG	Electric machine and installation
WO 2022092496 A1	KYUNGPOOK NAT UNIV IND ACADEMIC COOP FOUND	Device for diagnosing inter-turn short fault of induction motor and method therefor
WO 2022085351 A1	HITACHI ASTEMO LTD	Motor control device, mechatronic integrated unit, hybrid system, and electric power steering system
WO 2022114909 A1	SEOUL NATIONAL UNIV R&DB FOUNDATION	Motor device
WO 2022097345 A1	ASTER CO LTD	Coil, stator, and motor

[...volver a CONTENIDO](#)

CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022106339 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Semiconductor switch assembly comprising at least two power semiconductors
WO 2022106662 A1	RENAULT SAS	Battery charger for motor vehicle, associated vehicle and implementation method
WO 2022130612 A1	MITSUBISHI ELECTRIC CORP	Power conversion device
WO 2022122382 A1	BOSCH GMBH ROBERT	Control circuit for an electric machine, electric drive system, and method for decelerating an electric machine
WO 2022130221 A1	TALLINN UNIV OF TECHNOLOGY	System and method for a partial power transfer between two DC sources
WO 2022111894 A1	BOSCH GMBH ROBERT	Dc converter arrangement, on-board electrical system for an electric vehicle and method for operating a DC converter arrangement
WO 2022129538 A1	EATON INTELLIGENT POWER LTD	System and method of a mobile electrical system
WO 2022074141 A1	VITESCO TECHNOLOGIES GERMANY GMBH	Control module for a vehicle with at least one electric motor and a transmission
WO 2022131019 A1	DENSO CORP	Power conversion device
WO 2022112217 A1	VALEO SYSTEMES DE CONTROLE MOTEUR	Electronic component comprising a magnetic circuit and a plurality of electrical conductors
WO 2022126458 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Power supply device, battery management system, power supply system, control method and medium
WO 2022101824 A1	ALTRA S P A	Power-supply system of electric motors and auxiliary electric loads for an electric vehicle, and electric vehicle
WO 2022128252 A1	BOSCH GMBH ROBERT	Energy management system for a motor vehicle, motor vehicle, and method
WO 2022126205 A1	TRITIUM HOLDINGS PTY LTD	Electric vehicle charging system
WO 2022130731 A1	HITACHI ASTEMO LTD	Motor control device, electromechanical integrated unit, boost converter system, electric vehicle system, and motor control method
WO 2022074137 A1	VITESCO TECHNOLOGIES GERMANY GMBH	Compact control module for a vehicle with at least one electric motor and a transmission
WO 2022106035 A1	HUAWEI DIGITAL POWER TECH CO LTD	Asymmetrical impedance network for 3-port bidirectional isolated DC-DC converter
WO 2022122359 A1	BOSCH GMBH ROBERT	Charging circuit and method for charging an electrical energy store, and electric vehicle
WO 2022089789 A1	VALEO SIEMENS EAUTOMOTIVE NORWAY AS	An interleaved power converter comprising coupled inductors
WO 2022096818 A1	NIDEC PSA EMOTORS	Method for controlling an inverter and corresponding system
WO 2022109416 A1	UNIV CALIFORNIA	Multi-resonant switched capacitor power converter architecture
WO 2022107381 A1	NIDEC CORP	Temperature regulating device
WO 2022107382 A1	NIDEC CORP	Temperature regulating device
WO 2022083341 A1	NINGBO GEELY AUTOMOBILE RES & DEVELOPMENT CO LTD	Vehicle electrical system
WO 2022102510 A1	DENSO CORP	Inverter control device
WO 2022070282 A1	SUMITOMO ELECTRIC INDUSTRIES	Circuit structure
WO 2022120436 A1	INVERTEDPOWER PTY LTD	An interleaved switching method of control for a polyphase inductive load
WO 2022084245 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Device for providing an operating power for an auxiliary drive for an electric vehicle and method for converting an operating voltage
WO 2022118070 A1	BRUSA HYPOWER AG	Charging system, voltage converter unit, and accumulator unit
WO 2022117263 A1	VALEO SIEMENS EAUTOMOTIVE GERMANY GMBH	Inverter, electric drive, vehicle and method for controlling controllable switches of an inverter and corresponding computer program product
WO 2022070283 A1	SUMITOMO ELECTRIC INDUSTRIES	Heating structure

WO 2022084218 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Inverter device for an electric vehicle, drive device and method for providing a drive voltage for a drive motor for an electric vehicle
WO 2022119278 A1	HANON SYSTEMS	Arrangement and method for discharging a DC link capacitor
WO 2022071031 A1	TOYOTA JIDOSHOKKI KK	Noise filter
WO 2022070715 A1	PANASONIC IP MAN CO LTD	Management device and power supply system
WO 2022085495 A1	ROHM CO LTD	Controller and control method for power transistor
WO 2022102412 A1	HITACHI LTD	Power conversion device
WO 2022109728 A1	ECAMION INC	Electric vehicle charging depot and protection control module therefor
WO 2022114575 A1	KERI KOREA ELECTROTECHNOLOGY RES INST	Dc-to-dc converter for charging/discharging battery
WO 2022091710 A1	KYOCERA CORP	Film capacitor, connection-type capacitor, inverter and electric vehicle
WO 2022081338 A1	CUMMINS INC	Flexible isolated power-switch gate-drive power supply
WO 2022097561 A1	AUTONETWORKS TECHNOLOGIES LTD	DC/DC converter
WO 2022085393 A1	AUTONETWORKS TECHNOLOGIES LTD	Isolated DC/DC converter and isolated DC/DC converter production method
WO 2022086165 A1	WIPOWERONE INC	Wired and wireless vehicle charging system and wired and wireless charging control method
WO 2022097051 A1	AUCKLAND UNISERVICES LTD	A converter

[...volver a CONTENIDO](#)

RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022122901 A1	ATEQ	Charger for a service battery of an electric vehicle and electric vehicle comprising such a charger
WO 2022132252 A1	SCHUMACHER ELECTRIC CORP	Automotive battery power system
WO 2022106190 A1	ABB SCHWEIZ AG	Vehicle charging station
WO 2022112226 A1	VITO NV	Method and system for adaptively charging of electric vehicles
WO 2022119591 A1	AUTO MOTIVE POWER INC	Low cost fast charge contactor for high voltage battery management systems
WO 2022078777 A1	IFP ENERGIES NOW	Method for optimised management of the sequencing of vehicle charging on a local electricity grid
WO 2022091109 A1	TVS MOTOR CO LTD	A system and method for fast charging a battery using combined constant current and constant voltage charging
WO 2022084262 A1	NTN SNR ROULEMENTS	Method for charging the electric power supply battery of the engine of a motor vehicle
WO 2022084599 A1	ARKEMA FRANCE	Cooling a battery by immersion in a composition with a change in state
WO 2022082286 A1	CORDEIRO DE OLIVEIRA EMERSON	Rotary vertical parking space for electric vehicles and sliding cable distributor for vertical elevator
WO 2022090558 A1	COMMISSARIAT ENERGIE ATOMIQUE	Electric power supply system
WO 2022084263 A1	NTN SNR ROULEMENTS	Backup battery for charging the power supply battery of the motor of a motor vehicle
WO 2022080828 A1	LG CHEMICAL LTD	Vehicle battery overcharging prevention system and method
WO 2022085453 A1	DENSO CORP	Charge control device
WO 2022113918 A1	SUMITOMO ELECTRIC INDUSTRIES	Switching device, vehicle-mounted switching system, and switch control method
WO 2022068593 A1	BYD CO LTD	Charging control method and apparatus for hybrid electric vehicle, and vehicle
WO 2022092612 A1	LG ENERGY SOLUTION LTD	Charging management device, charging management method, and electric vehicle
WO 2022097555 A1	PANASONIC IP MAN CO LTD	Charge control device, charge system, charge control method, and program

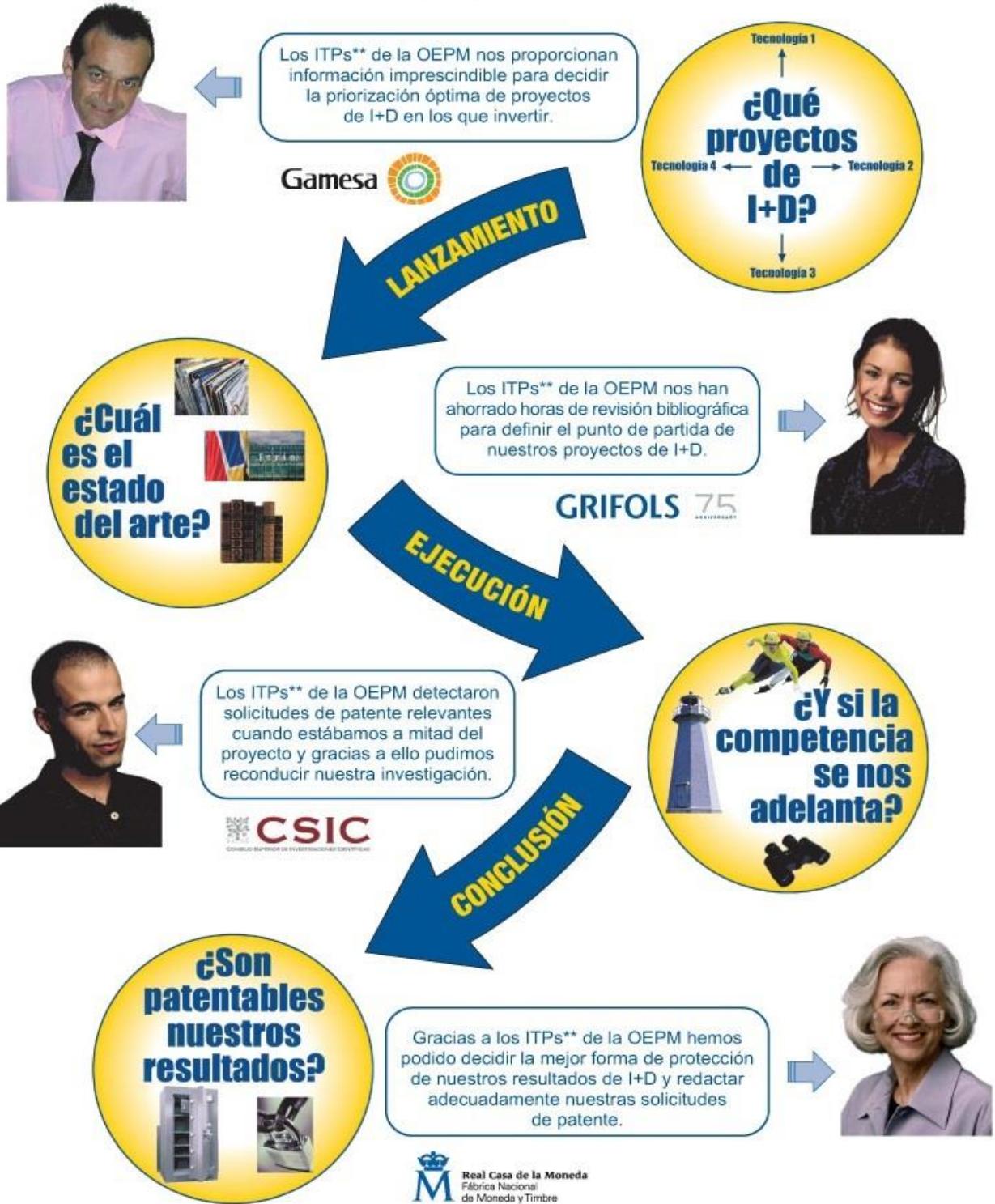
[...volver a CONTENIDO](#)

CAMBIO DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022094889 A1	RUDONG YANGKOU PORT IND HOLDINGS CO LTD	Battery swapping device for electric vehicle
WO 2022078329 A1	AULTON NEW ENERGY AUTOM TECH GROUP	Battery changing station

[...volver a CONTENIDO](#)

¡¡Por sólo 500€ añada 150 especialistas* a su Equipo de I+D!!



* 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.