

Noticias

El Ministerio de Industria, Comercio y Turismo aprobó el 21 de octubre de 2022, la [resolución definitiva](#) de la línea de apoyo a la cadena de valor industrial, del Proyecto Estratégico para la Recuperación y Transformación Económica del Vehículo Eléctrico y Conectado (PERTE_VEC), con una inversión pública de 877,2 millones de euros, lo que movilizará inversiones por valor de 2.250 millones de euros en el sector.

Con carácter general, se adelantará el 90% del importe total de la ayuda concedida a cada beneficiario.

Una vez finalizada la primera convocatoria de esta línea de apoyo a la cadena de valor industrial, se abrirá una nueva convocatoria.

El 24 de octubre conocimos los [resultados de la primera convocatoria del Programa MOVES Singulares II](#). De un total de 175 proyectos presentados, se han seleccionado 82 proyectos repartidos por 14 comunidades autónomas y permitirán canalizar una inversión de 217 millones.

El 35% de los proyectos seleccionados (29) están relacionados con la infraestructura de recarga innovadora, la recarga de hidrógeno y la integración con otras redes inteligentes.

El 25 de octubre salió publicada en el BOE la [Orden TED/1009/2022](#), de 24 de octubre, por la que se establece el listado de instalaciones de suministro de combustibles y carburantes obligadas a instalar infraestructuras de recarga eléctrica y las excepciones e imposibilidades técnicas para su cumplimiento.

De acuerdo con el mandato de la Ley 7/2021 de cambio climático y transición energética, las estaciones de servicio con ventas superiores a los 10 millones de litros de gasolinas y gasóleos en 2019 deberán instalar al menos un punto de recarga de potencia igual o superior a 150 kW.

Además, las estaciones de servicio con ventas superiores a cinco millones de litros de gasolinas y gasóleos en 2019 tendrán que instalar al menos un punto de recarga de potencia igual o superior a 50 kW. Estos mismos requisitos afectan a las gasolineras con ventas inferiores a cinco millones de litros, pero que lideren las ventas de las provincias, islas o ciudades autónomas en que se hallen, siempre que no haya gasolineras con ventas superiores a cinco millones de litros.

El titular de la estación de servicio podrá cumplir la obligación tanto si es el titular del punto de recarga como si el titular es un tercero, siempre que el punto se ubique dentro de las instalaciones de suministro de combustible y carburante, o en los terrenos adyacentes, a una distancia máxima de 300 metros.

Hay tres excepciones a la obligación con carácter general: instalaciones que ya dispongan de un punto de recarga con las mismas características al que deban instalar; instalaciones que no puedan cumplir las condiciones técnicas o los requisitos de calidad y seguridad industrial que sean de aplicación; e instalaciones en las que sea inviable ejecutar la acometida eléctrica necesaria para el punto de recarga.

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 2022207044 A1	CONTITECH TECHNO CHEMIE GMBH	Heat exchanger
WO 2022205228 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery remaining charging time estimation method and apparatus, and battery management system
WO 2022210698 A1	TORAY INDUSTRIES	Non-aqueous electrolyte secondary battery
WO 2022207923 A1	SCE FRANCE	Substituted lactones, polymers thereof, and processes for preparing same
WO 2022207991 A1	ARKEMA FRANCE	Method for recycling lithium salts from batteries
WO 2022211589 A1	SAMSUNG SDI CO LTD	Composite cathode active material, cathode and lithium battery employing same, and preparation method for same
WO 2022213781 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, and method and device for inhibiting battery inflation
WO 2022215235 A1	SHOWA DENKO MAT CO LTD	Lithium ion secondary battery and separation membrane
WO 2022211425 A1	LG CHEMICAL LTD	Non-aqueous electrolytic solution additive for lithium secondary battery, and non-aqueous electrolytic solution for lithium secondary battery and lithium secondary battery, each comprising same
WO 2022210515 A1	ISUZU MOTORS LTD	Battery unit
WO 2022207210 A1	BAYERISCHE MOTOREN WERKE AG	Battery module and method for bracing a battery module
WO 2022214574 A1	VALEO SYSTEMES THERMIQUES	Heat management device for an electrical and/or electronic component
WO 2022216092 A1	LG ENERGY SOLUTION LTD	Electrode assembly, battery cell, battery pack, and vehicle
WO 2022211705 A1	SCANIA CV AB	An electric battery cell unit and an electric battery arrangement
WO 2022206839 A1	BYD CO LTD	Battery pack power connection system and vehicle
WO 2022209546 A1	DENSO CORP	Balancing device
WO 2022205047 A1	DONGGUAN POWERAMP TECH LIMITED	Battery module and electric apparatus
WO 2022209058 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022209343 A1	PANASONIC IP MAN CO LTD	Remaining capacity notification device, remaining capacity notification method, and remaining capacity notification program
WO 2022211201 A1	KOREA ADVANCED INST SCI & TECH	Pulsating heat pipe-based battery cooling module and battery unit including the same
WO 2022209062 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022214571 A1	VALEO SYSTEMES THERMIQUES	Longitudinal plate for a thermal treatment device
WO 2022216460 A1	FMC LITHIUM USA CORP	Dry process for forming an electrode
WO 2022214572 A1	VALEO SYSTEMES THERMIQUES	Heat management device for an electrical and/or electronic component
WO 2022215878 A1	LG ENERGY SOLUTION LTD	Separator cutting device, and electrode cell manufacturing system comprising same
WO 2022205860 A1	BOE TECHNOLOGY GROUP CO LTD	Battery module manufacturing device and battery module manufacturing method
WO 2022208015 A1	COMMISSARIAT ENERGIE ATOMIQUE	Method for dissolving a positive electrode material
WO 2022211106 A1	UBE INDUSTRIES	Titanium-containing oxide powder, negative electrode active material composition using same, and all-solid-state secondary battery
WO 2022215519 A1	MITSUBISHI GAS CHEMICAL CO	Method for producing solid electrolyte powder, and method for producing all solid state battery
WO 2022209464 A1	OHARA KK	Lithium-ion-conductive material

WO 2022209601 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2022215659 A1	NIPPON STEEL CORP	Inter-battery-cell cooling structure, battery module, and battery pack
WO 2022214493 A1	SOLVAY	Liquid electrolyte for lithium secondary batteries
WO 2022214259 A1	BAYERISCHE MOTOREN WERKE AG	Electrical energy store having a lateral cell contact system, and motor vehicle
WO 2022215739 A1	DAINIPPON PRINTING CO LTD	Resin film for power storage device, and power storage device
WO 2022209676 A1	DENSO CORP	Impedance calculation device and battery management system
WO 2022212651 A1	LYTEN INC	Lithium-sulfur battery with a protective layer including carbon materials decorated with metal-containing substances
WO 2022220121 A1	VALEO JAPAN CO LTD	Battery cooling device and operation method for same
WO 2022220675 A1	UNIV DELFT TECH	Anode based on hydrogenated amorphous silicon carbide for application in lithium-ion batteries
WO 2022253897 A1	WEBASTO SE	Battery and battery control method
WO 2022222946 A1	SHEN XI	Current collector and graphite anode bipolar lithium ion battery
WO 2022225287 A1	UNIV ULSAN FOUND IND COOP	Sulfide-based solid electrolyte, preparation method thereof, and all-solid state battery prepared therefrom
WO 2022223892 A1	PSA AUTOMOBILES SA	Electrical power storage battery system comprising a safety venting system
WO 2022236736 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, battery cell, battery, and electrical device
WO 2022208625 A1	TDK CORP	Power storage device electrode and lithium ion secondary battery
WO 2022205829 A1	NINGDE AMPEREX TECHNOLOGY LTD	Electrochemical device and electronic device
WO 2022220297 A1	APB CORP	Battery module management device and battery module management method
WO 2022225196 A1	LG ENERGY SOLUTION LTD	Electrolyte solution for lithium-sulfur secondary battery, and lithium-sulfur secondary battery comprising same
WO 2022224568 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2022265966 A1	ZELOS ENERGY LTD	Rechargeable cell architecture
WO 2022225381 A1	PI ADVANCED MAT CO LTD	Polyamic acid composition
WO 2022225054 A1	MITSUI CHEMICALS INC	Temperature control panel-containing structure and temperature control pack
WO 2022238241 A1	ELRINGKLINGER AG	Component, method for producing a component, and assembly
WO 2022249049 A1	COMAU SPA	An apparatus and method for assembling a battery pack for powering electric traction motors of electric motor-vehicles
WO 2022252653 A1	GUANGZHOU AUTOMOBILE GROUP CO	Thermal management system and electric vehicle having same
WO 2022204935 A1	DOW GLOBAL TECHNOLOGIES LLC	Curable polyolefin composition and cured product
WO 2022219301 A1	DYSON TECHNOLOGY LTD	Electrolyte compositions
WO 2022247991 A1	UNIV BERLIN TECH	Method and device for the non-invasive determination of a battery, and battery management system
WO 2022263677 A1	WEBASTO SE	Battery module and drive battery
WO 2022223188 A1	PSA AUTOMOBILES SA	Mounting element, separating wall and system for shielding battery modules
WO 2022211502 A1	LG ENERGY SOLUTION LTD	Battery cell manufacturing method and battery cell manufacturing apparatus
WO 2022217264 A1	POLESTAR AUTOMOTIVE USA INC	Electric vehicle battery cooling through extrusions
WO 2022225364 A1	LG ENERGY SOLUTION LTD	Electrode coating die, electrode coating apparatus, electrode manufacturing method, electrode, electrode assembly, and secondary battery
WO 2022226965 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, power-consuming device, and manufacturing method and device for battery
WO 2022253381 A1	HANON SYSTEMS EFP DEUTSCHLAND GMBH	Fluid line connection arrangement
WO 2022253992 A1	TOTALENERGIES ONETECH	Use of a cooling composition to protect a battery
WO 2022265018 A1	MITSUI CHEMICALS INC	Case and pack

WO 2022218212 A1	SHENZHEN DYNANONIC INNOVAZONE NEW ENERGY TECH CO LTD	Lithium supplementary additive, preparation method therefor and application thereof
WO 2022220396 A1	LG ENERGY SOLUTION LTD	Battery pack
WO 2022260219 A1	LPN CO LTD	Novel composite negative electrode active material, lithium battery comprising same, and method for preparing composite negative electrode active material
WO 2022220214 A1	GS YUASA INT LTD	Voltage estimation method, voltage estimation device, and voltage estimation program
WO 2022220050 A1	PANASONIC IP MAN CO LTD	Management system for power storage device
WO 2022221134 A1	ANALOG DEVICES INC	Technique for estimation of internal battery temperature
WO 2022221307 A1	UNIV CALIFORNIA	Ionic liquid inspired zwitterions with high conductivity and transport number
WO 2022224691 A1	AUTONETWORKS TECHNOLOGIES LTD	Vehicle-mounted control device
WO 2022252015 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method for determining state of charge of battery, and battery management system and electric apparatus
WO 2022218893 A1	VALEO SYSTEMES THERMIQUES	Heat transfer module and corresponding thermal regulation assembly, in particular for a motor vehicle
WO 2022238480 A1	DUKOSI LTD	Battery cell position determination
WO 2022252114 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	End cover assembly, battery cell, battery, and manufacturing device and method for battery cell
WO 2022263503 A1	VOLVO CAR CORP	Thermal management system for a vehicle
WO 2022205084 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery box body, battery, electric device, method and apparatus for preparing box body
WO 2022219913 A1	SUMITOMO ELECTRIC INDUSTRIES	Battery management system, temperature measurement device, and control method
WO 2022224682 A1	DENSO CORP	Battery monitoring device
WO 2022224872 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2022236220 A1	A123 SYSTEMS LLC	Methods and systems for cathode pre-lithiation layer
WO 2022248534 A1	UMICORE NV	Lithium nickel-based composite oxide as a positive electrode active material for solid-state lithium-ion rechargeable batteries
WO 2022211320 A1	LG ENERGY SOLUTION LTD	Electrolyte additive for secondary battery, non-aqueous electrolyte comprising same for lithium secondary battery, and lithium secondary battery
WO 2022219427 A1	3M INNOVATIVE PROPERTIES CO	Compositions comprising cyclic olefins and thermally conductive filler and adhesion promoter
WO 2022228748 A1	MERCEDES BENZ GROUP AG	Cooling and heating system for a vehicle, and vehicle
WO 2022226974 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery module, battery pack, electrical apparatus, and manufacturing method and device for battery module
WO 2022256685 A1	PURE LITHIUM CORP	Lithium deposition and battery using inorganic molten salts
WO 2022252011 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, fabrication method and fabrication device therefor, and electric apparatus
WO 2022224681 A1	DENSO CORP	Battery monitoring device and electric vehicle having same installed therein
WO 2022232541 A1	CPS TECH HOLDINGS LLC	Battery and method of allowing for volumetric expansion of battery cells within a battery
WO 2022233524 A1	BAYERISCHE MOTOREN WERKE AG	Heat management system for an electrified motor vehicle
WO 2022219303 A1	UPGRADE TECH ENGINEERING LTD	A battery cell holder
WO 2022220656 A1	LG ENERGY SOLUTION LTD	Secondary battery
WO 2022238631 A1	PSA AUTOMOBILES SA	Battery unit comprising cooling means
WO 2022223551 A1	AMER SIL SA	Battery separator for reducing water loss
WO 2022246660 A1	EVONIK OPERATIONS GMBH	Comb-branched polymer/silica nanoparticles hybrid polymer electrolytes for solid-state lithium metal secondary batteries
WO 2022264674 A1	TOYOTA JIDOSHOKKI KK	Power storage device
WO 2022210191 A1	NISSAN MOTOR	Lithium secondary battery

WO 2022223396 A1	DRAEXLMAIER LISA GMBH	Battery receiving system
WO 2022224850 A1	SHOWA DENKO MAT CO LTD	Nickel-zinc battery control method and power supply system
WO 2022218143 A1	SHENZHEN CAPCHEM TECHNOLOGY CO LTD	Iron phosphate lithium battery
WO 2022226546 A1	UNIV DREXEL	Sulfur-loaded conductive polymer for high energy density lithium sulfide battery
WO 2022224264 A1	BATX ENERGIES PVT LTD	A method for recycling of used scrap lithium battery
WO 2022228540 A1	HUAWEI TECH CO LTD	Battery system and vehicle
WO 2022260279 A1	LG ENERGY SOLUTION LTD	Battery module, and battery pack and vehicle comprising same
WO 2022205076 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, power device, and method and device for preparing battery
WO 2022230900 A1	MURATA MANUFACTURING CO	Solid-state battery package
WO 2022248968 A1	SEMICONDUCTOR ENERGY LAB	Battery, electronic device, power storage system, and mobile body
WO 2022205221 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery module, battery pack, electrical apparatus, and manufacturing method and manufacturing device for battery module
WO 2022230468 A1	NISSAN MOTOR	Lithium secondary battery
WO 2022235138 A1	LG CHEMICAL LTD	Crosslinked structure-containing olefin polymer porous support, crosslinked structure-containing separator comprising same for lithium secondary battery, manufacturing method therefor, and lithium secondary battery comprising same separator
WO 2022254777 A1	PANASONIC IP MAN CO LTD	Charger selection system, charger selection method, and charger selection program
WO 2022259797 A1	PANASONIC IP MAN CO LTD	Coated positive electrode active substance, positive electrode material, and battery
WO 2022260306 A1	LG ENERGY SOLUTION LTD	Battery cell fixing device and electrolyte impregnating device including same
WO 2022259973 A1	NUVOTON TECH CORPORATION JAPAN	Battery abnormality detecting device, and battery abnormality detecting method
WO 2022219222 A1	METSO OUTOTEC FINLAND OY	Extraction of metals from lithium-ion battery material
WO 2022250076 A1	ENERGYWITH CO LTD	Battery management system, battery management method, and battery management program
WO 2022205080 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric apparatus, and method and apparatus for preparing battery
WO 2022243442 A1	CAMBRIDGE DISPLAY TECH LTD	Composition and battery
WO 2022219751 A1	NISSAN MOTOR	Thermal chain reaction determination method and thermal chain reaction detection system for battery pack
WO 2022226806 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electric device, and method and device for preparing battery cell
WO 2022259820 A1	PANASONIC IP MAN CO LTD	Coated positive electrode active substance, positive electrode material, and battery
WO 2022259670 A1	NIPPON CATALYTIC CHEM IND	Storage method for non-aqueous electrolyte
WO 2022250506 A1	LG ENERGY SOLUTION LTD	All-solid-state lithium secondary battery and method for manufacturing same
WO 2022252093 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium ion battery, battery module, battery pack and electric apparatus
WO 2022252108 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	End cover assembly, battery cell, battery and power-consuming apparatus
WO 2022252165 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, power-consuming apparatus, and apparatus and method for manufacturing battery cell
WO 2022225380 A1	LG ENERGY SOLUTION LTD	Secondary battery manufacturing method
WO 2022255159 A1	VALEO JAPAN CO LTD	Battery cooling unit and battery cooling system
WO 2022243243 A1	ACCUMULATEURS FIXES	Electrochemical element for a battery, and corresponding battery

WO 2022252111 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium manganese oxide positive electrode active material, positive electrode plate containing same, secondary battery, battery module, battery pack and electrical device
WO 2022205069 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Case of battery, battery, electronic device, and method and device for preparing battery
WO 2022231253 A1	POSCO	Positive active material, preparing method thereof and rechargeable lithium battery
WO 2022236340 A1	GLOBAL GRAPHENE GROUP INC	Thermally stable polymer composite separator for a lithium secondary battery and manufacturing method
WO 2022254752 A1	CANON OPTRON INC	Ion conductive solid and all-solid-state battery
WO 2022230931 A1	TOYOTA JIDOSHOKKI KK	Bipolar electrode for metal hydride battery, metal hydride battery equipped with bipolar electrode, method for producing bipolar electrode for metal hydride battery, and method for producing metal hydride battery
WO 2022249916 A1	PANASONIC IP MAN CO LTD	Battery abnormality prediction system, battery abnormality prediction method, and battery abnormality prediction program
WO 2022249933 A1	ZEON CORP	Binder composition for all-solid-state secondary batteries, slurry composition for all-solid-state secondary batteries, functional layer for all-solid-state secondary batteries, and all-solid-state secondary battery
WO 2022250080 A1	SHOWA DENKO KK	Nonaqueous secondary battery electrode binder, and nonaqueous secondary battery electrode
WO 202218594 A1	PSA AUTOMOBILES SA	Energy management device and method for providing an estimated energy value for an energy store
WO 202215126 A1	SHOWA DENKO MAT CO LTD	Negative electrode material for lithium-ion secondary battery, negative electrode for lithium-ion secondary battery, and lithium-ion secondary battery
WO 2022226336 A1	CUMMINS INC	Methods and systems of aging-aware charging profile calculation for a battery system
WO 2022230426 A1	SHOWA DENKO KK	Lithium ion conducting oxide and all solid battery
WO 2022255994 A1	GREEN CUBES TECH LLC	Current sharing in parallel battery system
WO 2022260001 A1	GS YUASA INT LTD	Polymer solid electrolyte, power storage element, and power storage device
WO 2022259722 A1	VEHICLE ENERGY JAPAN INC	Battery module and method for inspecting battery module
WO 2022231396 A1	LG ENERGY SOLUTION LTD	Solid electrolyte for all-solid-state battery and production method therefor
WO 202227903 A1	TIANJIN GUOAN MENGGLI NEW MATERIALS SCIENCE TECH CO LTD	High-nickel precursor and preparation method therefor, and high-nickel positive electrode material and preparation method therefor
WO 2022235931 A1	UNIV CALIFORNIA	Materials, components, and designs for high power batteries
WO 202221019 A1	ENEVATE CORP	Method and system for periodic deep discharge to extract lithium in silicon-dominant anodes
WO 2022233508 A1	NORTHVOLT AB	A cylindrical secondary cell and a method of its manufacture
WO 2022251738 A1	CUMMINS INC	Module-less sub-pack design
WO 2022214441 A1	DUKOSI LTD	Battery cell position determination
WO 2022243242 A1	TANKTWO OY	Modular battery system
WO 2022250427 A1	LG ENERGY SOLUTION LTD	Apparatus for manufacturing film-type positive electrode, method for manufacturing same, and lithium secondary battery, battery module and battery pack comprising same
WO 2022260056 A1	GS YUASA INT LTD	All-solid-state electrochemical element and sulfur-carbon complex
WO 2022250505 A1	LG ENERGY SOLUTION LTD	All-solid-state lithium secondary battery and method for manufacturing same
WO 2022255937 A1	XNERGY AUTONOMOUS POWER TECH PTE LTD	Method of charging a rechargeable electrical energy storage and charger controller thereof
WO 2022244570 A1	NIPPON STEEL CORP	Cooling structure, battery unit, and cooling structure manufacturing method
WO 2022254755 A1	CANON OPTRON INC	Ion conductive solid and solid-state battery
WO 2022236283 A1	BATTELLE ENERGY ALLIANCE LLC	Electrochemical membrane apparatus including an electrochemical membrane reactor, and related methods
WO 2022239527 A1	PANASONIC IP MAN CO LTD	Battery and method for manufacturing battery
WO 2022244759 A1	APB CORP	Inspection method for layered sheet, production method for layered sheet, and production method for battery pack
WO 2022244760 A1	APB CORP	Battery member inspection method, battery member manufacturing method, and battery pack manufacturing method
WO 2022248245 A1	UMICORE NV	Recovery of nickel and cobalt from li-ion batteries or their waste

WO 2022246841 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Gas adsorption apparatus, end cover assembly, battery cell, battery, and electrical device
WO 2022254756 A1	CANON OPTRON INC	Ion-conductive solid and all-solid-state battery
WO 2022221598 A2	CPS TECH HOLDINGS LLC	Intelligent lead-acid battery system and method of operating the same
WO 2022241559 A1	UTI LP	Battery and electrolytes therefor
WO 2022255480 A1	NUVOTON TECH CORPORATION JAPAN	Battery state estimation device, battery state estimation system, and battery state estimation method
WO 2022207449 A2	LEIBNIZ INSTITUT FUER NEUE MAT GEMEINNUETZIGE GMBH	Stabilized electrodes
WO 2022245010 A1	LG ENERGY SOLUTION LTD	Lithium-sulfur battery having improved cycle life performance
WO 2022235192 A1	APR TECH AB	Thermal management of a liquid cooled module
WO 2022239486 A1	PANASONIC IP MAN CO LTD	Battery and method for producing battery
WO 2022239807 A1	NIPPON CATALYTIC CHEM IND	Non-aqueous electrolytic solution and secondary battery
WO 202221285 A1	WORCESTER POLYTECH INST	Lithium recovery process
WO 2022239557 A1	MIRAI LABO KK	Battery management system, battery management method, and program
WO 2022241464 A1	GLOBAL GRAPHENE GROUP INC	Thermally stable polymer-based composite separator for a lithium secondary battery and manufacturing method
WO 2022239525 A1	PANASONIC IP MAN CO LTD	Battery
WO 2022255817 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery and manufacturing method therefor
WO 2022241686 A1	ZHUHAI COSMX BATTERY CO LTD	Negative electrode plate and application thereof
WO 2022244303 A1	PANASONIC IP MAN CO LTD	Battery and method for manufacturing battery
WO 2022244568 A1	NIPPON STEEL CORP	Cooling structure, battery unit, and manufacturing method for cooling structure
WO 2022217559 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Negative electrode sheet, preparation method therefor, and secondary battery, battery module, battery pack, and electric apparatus containing same
WO 2022233050 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, battery, device, and manufacturing method for electrode assembly
WO 2022250254 A1	IUCF HYU	Crosslinking agent for quasi-solid electrolyte, quasi-solid electrolyte comprising same, and secondary battery using same
WO 2022250326 A1	LG ENERGY SOLUTION LTD	Anode for lithium secondary battery, and lithium secondary battery comprising same
WO 2022259800 A1	DENSO CORP	Battery measurement device and battery state measurement method
WO 2022239558 A1	MIRAI LABO KK	Power supply device and battery degradation determination system
WO 2022249615 A1	DOWA ECO SYSTEM CO LTD	Sorting method for valuable materials
WO 2022250504 A1	LG ENERGY SOLUTION LTD	All-solid lithium secondary battery and preparation method thereof
WO 2022255745 A1	LG ENERGY SOLUTION LTD	All-solid-state lithium secondary battery and manufacturing method therefor
WO 2022219629 A1	SPARKION POWER ALGORITHMS LTD	Switch systems for rechargeable power storage devices
WO 2022241160 A1	VELOCE ENERGY INC	Electric vehicle charging sites
WO 2022255224 A1	MITSUI CHEMICALS INC	Non-aqueous electrolyte for battery, lithium secondary battery precursor, method for manufacturing lithium secondary battery, and lithium secondary battery
WO 2022242323 A1	GREAT WALL MOTOR CO LTD	Heat control method and apparatus, and vehicle
WO 2022246541 A1	ZENTEK LTD	Graphene composite battery electrode particles with void space and methods of making same
WO 2022235047 A1	LG CHEMICAL LTD	Positive electrode active material for lithium secondary battery, and positive electrode and lithium secondary battery comprising same
WO 2022239221 A1	SHINETSU POLYMER CO	Thermally conductive member, manufacturing method of thermally conductive member, and battery

WO 2022250325 A1	LG ENERGY SOLUTION LTD	Electrode assembly for lithium secondary battery, and lithium secondary battery comprising same
WO 2022239526 A1	PANASONIC IP MAN CO LTD	Battery and method for producing battery
WO 2022244808 A1	FURUKAWA BATTERY CO LTD	Lithium ion secondary battery
WO 2022250519 A1	LG ENERGY SOLUTION LTD	Method for manufacturing gel polymer electrolyte secondary battery and gel polymer electrolyte secondary battery manufactured thereby
WO 2022249937 A1	NISSHA CO LTD	Nonaqueous electrolytic solution secondary battery
WO 2022249538 A1	TOYOTA JIDOSHOKKI KK	Electric power storage module
WO 2022259609 A1	TOYOTA JIDOSHOKKI KK	Method for manufacturing bipolar power storage device
WO 2022222141 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, battery cell, battery, and method and device for manufacturing electrode assembly
WO 2022241301 A1	UNIV CARNEGIE MELLON	System and method for application-dependent selection of batteries with differentiable programming
WO 2022244569 A1	NIPPON STEEL CORP	Cooling structure, battery unit, and manufacturing method for cooling structure
WO 2022222092 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly and manufacturing method and manufacturing system therefor, battery cell, and battery
WO 2022234282 A2	ACELERON LTD	Battery
WO 2022244663 A1	HONDA MOTOR CO LTD	Battery exchange system
WO 2022250361 A1	INDUSTRY UNIV JOINT RESEARCH INSTITUTE OF GACHON UNIV	Cathode for lithium secondary battery and method for manufacturing same
WO 2022244991 A1	EEST INC	Electric vehicle charging apparatus of battery exchange type with bumper having opening/closing function
WO 2022250323 A1	LG ENERGY SOLUTION LTD	Positive electrode slurry and positive electrode for lithium secondary battery using same
WO 2022254753 A1	CANON OPTRON INC	Ion-conductive solid and all-solid-state battery
WO 2022244992 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2022245336 A1	WAERTSILAE NORTH AMERICA INC	Apparatus, device and computer implemented method for controlling cooling of energy storage module
WO 2022240129 A1	LG CHEMICAL LTD	Positive electrode active material and method for producing same
WO 2022241538 A1	LI METAL CORP	Lithium metal anode assemblies and an apparatus and method of making same
WO 2022255667 A1	LG ENERGY SOLUTION LTD	Positive electrode comprising positive electrode additive, method for manufacturing same, and lithium secondary battery comprising same
WO 2022217399 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	State-of-charge cutoff method and apparatus, and control system and storage medium
WO 2022246455 A1	GLOBAL GRAPHENE GROUP INC	Polymer composite separator for a lithium secondary battery and manufacturing method
WO 2022254754 A1	CANON OPTRON INC	Ion conductive solid and all-solid-state battery
WO 2022254757 A1	CANON OPTRON INC	Ion conductive solid and all-solid battery
WO 2022239980 A1	SOHN YOUNG CHAN	Spare battery and battery pack for electric vehicle
WO 2022245135 A1	NAMDO MOLD CO LTD	Electric vehicle battery case
WO 2022226748 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery group, battery pack, electric apparatus, and manufacturing method and manufacturing device for battery group

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SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022215513 A1	AGC INC	Electrode coating liquid, electrode, and electrochemical device
WO 2022209160 A1	PANASONIC IP MAN CO LTD	Cutting device and cutting method
WO 2022215511 A1	AGC INC	Coating liquid for electrodes, electrode, and electrochemical device
WO 2022215740 A1	DAINIPPON PRINTING CO LTD	Exterior material for power storage device, method for producing said exterior material, sealant film, and power storage device
WO 2022215286 A1	VEHICLE ENERGY JAPAN INC	Battery pack
WO 2022209815 A1	GS YUASA INT LTD	Positive electrode active material for nonaqueous electrolyte power storage elements, positive electrode for nonaqueous electrolyte power storage elements, nonaqueous electrolyte power storage element, power storage unit, and power storage device
WO 2022210994 A1	TODA KOGYO CORP	Silicon-containing amorphous carbon particle, manufacturing method therefor, and lithium-ion secondary battery
WO 2022215516 A1	AGC INC	Coating solution for electrode, electrode, and electrochemical device
WO 2022210060 A1	OSAKA SODA CO LTD	Negative electrode protecting film
WO 2022264583 A1	TOYOTA JIDOSHOKKI KK	Method for manufacturing power storage device
WO 202224990 A1	AZUL ENERGY INC	Capacitor, and capacitor composite material and method for manufacturing same
WO 2022260022 A1	HONDA MOTOR CO LTD	Power storage holding device
WO 2022255377 A1	PIOLAX INC	Pressure release valve for power storage device
WO 2022261464 A1	SYSTEMATIC POWER MFG LLC	Stand-by power module for vehicle engine
WO 2022232587 A1	UNIV WASHINGTON	Porous cubic sodium yttrium fluoride gels, systems, methods, and materials thereof
WO 2022249667 A1	GS YUASA INT LTD	Nonaqueous electrolyte power storage element and power storage device
WO 2022239614 A1	GS YUASA INT LTD	Sulfide solid electrolyte, method for producing sulfide solid electrolyte, power storage element, electronic device, and automobile

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SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022212578 A1	TOYOTA ENG & MFG NORTH AMERICA	Continuously adaptable braking pedal map system
WO 2022230545 A1	DAIMLER AG	Shift device for electric vehicle
WO 2022251072 A1	CUMMINS INC	Method and system with selectable multimode control of regenerative braking torque limitation
WO 2022236440 A1	XU LIMIN	Ring-slot current collector homopolar electromagnetic transmission and application thereof

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MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022209907 A1	AICHI STEEL CORP	Electric motor with gear
WO 2022213091 A1	METAL FORMING & COINING CORP	Rotor shaft
WO 2022214121 A1	SCHAEFFLER TECHNOLOGIES AG	Electric machine
WO 2022207465 A1	VALEO SIEMENS EAUTOMOTIVE GERMANY GMBH	Electric machine having a pressure equalization element
WO 2022209671 A1	TOYOTA JIDOSHOKKI KK	Electric compressor
WO 2022204992 A1	HUAWEI DIGITAL POWER TECH CO LTD	Electric motor rotor, electric motor and electric vehicle
WO 2022208929 A1	HITACHI ASTEMO LTD	Stator for rotary electric machine and rotary electric machine
WO 2022214141 A1	SCHAEFFLER TECHNOLOGIES AG	Electric machine
WO 2022233583 A1	HELLA GMBH & CO KGAA	Brushless electric motor
WO 2022247981 A1	SCHAEFFLER TECHNOLOGIES AG	Electrically operatable powertrain, method for controlling an electrically operatable powertrain, computer program product, and control unit
WO 2022219078 A1	MOLABO GMBH	Phase connection for electric motors for measuring phase currents
WO 2022224857 A1	DENSO ELECTRONICS CORP	Relay controller
WO 2022220264 A1	NIPPON STEEL CORP	Method for manufacturing bonded laminate core and bonded laminate core manufacturing device
WO 2022219022 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Adapter for connecting an electric motor to an inverter
WO 2022211701 A1	SCANIA CV AB	Stator for electric machine, electric machine, vehicle, and method of assembling a stator
WO 2022220262 A1	NIPPON STEEL CORP	Electromagnetic steel sheet and adhesion laminated core production method
WO 2022223810 A1	PUNCH POWERTRAIN PSA E TRANS NV	Cooling of an electric motor
WO 2022220260 A1	NIPPON STEEL CORP	Method for manufacturing bonded laminate core and bonded laminate core manufacturing device
WO 2022259876 A1	MITSUBISHI MOTORS CORP	Vehicle control device
WO 2022243411 A1	BROSE FAHRZEUGTEILE SE & CO KG WUERZBURG	Rotor for an electric motor
WO 2022248112 A1	BAYERISCHE MOTOREN WERKE AG	Method for controlling the drive force of a motor vehicle rear axle, which is driven by an electric motor, in the event of an imminent drive over a milled edge
WO 2022239561 A1	TOP CO LTD	Coil and rotary machine
WO 2022235951 A1	EXEDY GLOBALPARTS CORP	Compact p2 hybrid architecture
WO 2022254631 A1	NISSAN MOTOR	Rotary electrical machine
WO 2022232928 A1	LITENS AUTOMOTIVE INC	A battery pack for an electric vehicle
WO 2022244162 A1	NISSAN MOTOR	Electric motor unit
WO 2022241269 A1	TAU MOTORS INC	Dynamically configurable hardware system for motor system and method for operating same

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CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022210540 A1	ROHM CO LTD	Insulating transformer
WO 2022207512 A1	KEBA IND AUTOMATION GERMANY GMBH	DC-to-DC converter device for a wind turbine, an electric drive system or an industrial dc supply system, and operating method
WO 2022207513 A1	KEBA IND AUTOMATION GERMANY GMBH	Bidirectional DC-to-DC converter and operating method
WO 2022215358 A1	mitsubishi heavy ind ltd	Casing and power conversion device
WO 2022216738 A1	GEORGIA TECH RES INST	Modular multiport ac battery power converter systems and methods of using same
WO 2022207065 A1	HUAWEI TECH CO LTD	AC/DC converter and a control method thereof for charging electrical vehicles
WO 2022207467 A1	KEBA ENERGY AUTOMATION GMBH	Charging station and method for operating a charging station
WO 2022207258 A1	KEBA ENERGY AUTOMATION GMBH	Charging station, system, and method
WO 2022208707 A1	MITSUBISHI ELECTRIC CORP	In-vehicle charging device
WO 2022207812 A1	KEBA ENERGY AUTOMATION GMBH	Charging station and method for operating a charging station
WO 2022210549 A1	ROHM CO LTD	Insulating transformer
WO 2022210541 A1	ROHM CO LTD	Isolation transformer
WO 2022248210 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Half-bridge, power module, and inverter for an electric drive of an electric vehicle or a hybrid vehicle
WO 2022208910 A1	NIDEC CORP	Drive motor module
WO 2022225971 A1	EPIRUS INC	Systems and methods for high power dc chargers
WO 2022223138 A1	ABB SCHWEIZ AG	DC distribution system, and a power convertor for use in such DC distribution system
WO 2022263233 A1	MAGNA POWERTRAIN GMBH & CO KG	Low-inductance busbar between half-bridge module and intermediate circuit
WO 2022209584 A1	ROHM CO LTD	Semiconductor device
WO 2022262893 A1	SCHAEFFLER TECHNOLOGIES AG	Active discharge of a vehicle intermediate circuit element using a discrete pwm pulse-generating discharge circuit
WO 2022231737 A1	RESILIENT POWER SYSTEMS INC	Systems, apparatus and methods for electric vehicle charging via a power conversion system
WO 2022223448 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Inverter structure of an electronics module for an electric drive of a vehicle
WO 2022226942 A1	HUAWEI TECH CO LTD	Converter for power conversion, three-phase converter arrangement and method for packaging a converter
WO 2022255485 A1	NIDEC ELESYS CORP	Inverter device
WO 2022229122 A1	BORGWARNER SWEDEN AB	Charging circuit for an energy storage device of a vehicle
WO 2022260929 A1	GINART ANTONIO	Electric vehicle solar charging system
WO 2022230337 A1	HITACHI ASTEMO LTD	Drive device for semiconductor switching element, driving method thereof, and power conversion device
WO 2022254569 A1	MITSUBISHI ELECTRIC CORP	Power semiconductor element drive adjustment circuit, power module, and power conversion device
WO 2022259624 A1	HITACHI ASTEMO LTD	Inverter control device, inverter control method
WO 2022226990 A1	HUAWEI DIGITAL POWER TECH CO LTD	Electric motor driving apparatus, electric motor system, and electric vehicle
WO 2022258782 A2	CAPACTECH LTD	Power supply and distribution networks
WO 2022259867 A1	DENSO CORP	Power conversion device
WO 2022239920 A1	HYOSUNG CORP	Composite charging system and method
WO 2022249702 A1	DENSO CORP	Monitoring device and battery apparatus comprising same
WO 2022243423 A1	PRODRIVE TECH INNOVATION SERVICES B V	Electrical converter with overvoltage protection circuit
WO 2022254994 A1	HITACHI LTD	Electric power converting device, electric power converting system, and method for controlling electric power converting device
WO 2022260089 A1	AUTONETWORKS TECHNOLOGIES LTD	Reactor, converter, and power conversion device
WO 2022250358 A1	AMONSENSE CO LTD	Inverter power module
WO 2022239586 A1	HITACHI LTD	Inverter control device and power conversion device

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RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022210463 A1	ISUZU MOTORS LTD	Control device and control method
WO 2022216249 A1	ARNEO YAZILIM ENERJI SAN VE TIC A S	Charging station with a management system for electric vehicles
WO 2022263177 A1	MERCEDES BENZ GROUP AG	Method for locating a reserved charging post, and at least partly electrically driven vehicle
WO 2022266064 A1	VOLTA CHARGING LLC	Systems and methods for integrating a step-down transformer into an electric vehicle charging station
WO 2022219023 A1	MERCEDES BENZ GROUP AG	Onboard electrical system for a vehicle, vehicle comprising an onboard electrical system, and method for operating an onboard electrical system for a vehicle
WO 2022207116 A1	FANSY VENTURES S A R L	A plug-in module for wireless charging
WO 2022211819 A1	VOLVO TRUCK CORP	Auxiliary range extension for battery electric vehicle
WO 2022235167 A1	PETRO WELL SERVICES AS	Charging station for electrical vehicles, including fuel battery system
WO 2022238165 A1	JUICE TECH AG	Mobile charging apparatus, and method for assembly thereof
WO 2022238632 A1	PSA AUTOMOBILES SA	Method for the thermal protection of a charging device carried on board an electrified vehicle
WO 2022250922 A1	ZOOX INC	DC fast charger wireless-charging adapter
WO 2022258564 A1	PHOENIX CONTACT E MOBILITY GMBH	Cable with active cooling
WO 2022219024 A1	MERCEDES BENZ GROUP AG	Method for carrying out a pre-charging process of an onboard electrical system of a vehicle, and onboard electrical system for a vehicle
WO 2022254107 A1	PSA AUTOMOBILES SA	Method for recharging a battery as a function of the temperature of the outside environment for a fast-recharge mode
WO 2022264156 A1	TVS MOTOR CO LTD	A battery charging system for a vehicle and a method thereof
WO 2022209241 A1	PANASONIC IP CORP AMERICA	Charge management method, program, and charge management system
WO 2022229913 A1	TORINO POLITECNICO	Electric vehicle
WO 202221583 A1	CHARGEPOINT INC	Electric vehicle charging system with a charging cable that includes an inline cable controller
WO 2022231062 A1	KOOKMIN UNIV INDUSTRY ACADEMIC COOPERATION FOUNDATION	Battery charging method and battery charging device
WO 2022260534 A1	ENATEL	Motive power electrical energy storage systems and methods
WO 2022245851 A1	STUBBS RUSTEE	Removably attachable vehicle battery charger

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CAMBIO DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2022235473 A1	POPION MOBILITY INC	Methods and systems for end-to-end infrastructure for supporting use of swappable batteries in electric vehicles
WO 2022221111 A1	WU LIXIONG	Apparatus and method for electric vehicle battery resource sharing

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EJECUCIÓN



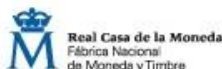
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CONCLUSIÓN



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