

Noticias

El 29 de mayo, se promulgó el Real Decreto 406/2023, por el que se modifican el Real Decreto 266/2021, de 13 de abril, por el que se aprueba la concesión directa de ayudas a las comunidades autónomas y a las ciudades de Ceuta y Melilla para la ejecución de programas de incentivos ligados a la movilidad eléctrica (MOVES III) en el marco del Plan de Recuperación, Transformación y Resiliencia Europeo; el Real Decreto 1124/2021, de 21 de diciembre, por el que se aprueba la concesión directa a las comunidades autónomas y a las ciudades de Ceuta y Melilla de ayudas para la ejecución de los programas de incentivos para la implantación de instalaciones de energías renovables térmicas en diferentes sectores de la economía, en el marco del Plan de Recuperación, Transformación y Resiliencia; y el Real Decreto 263/2019, de 12 de abril, por el que se regula el Programa de ayudas para actuaciones de eficiencia energética en PYME y gran empresa del sector. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2023-12786

De conformidad con lo previsto en los artículos 17.3.b y 20.8.a de la Ley 38/2003, de 17 de noviembre, General de Subvenciones, se publica el extracto de la convocatoria cuyo texto completo puede consultarse en la Base de Datos Nacional de Subvenciones (<https://www.infosubvenciones.es/bdnstrans/GE/es/convocatoria/615575>). Se modifica el siguiente apartado del Extracto de la Orden ICT/209/2022, de 17 de marzo, por la que se efectúa la convocatoria correspondiente al año 2022, y se modifica la Orden ICT/1466/2021, de 23 de diciembre, por la que se establecen las bases reguladoras a la concesión de ayudas del

Proyecto Estratégico para la Recuperación y Transformación Económica en el sector del Vehículo Eléctrico y Conectado en el marco del Plan de Recuperación, Transformación y Resiliencia: Sexto. Plazo de presentación de solicitudes. Se pospone los efectos de la convocatoria, por lo que el plazo de presentación de solicitudes se amplía, finalizando el día 3 de junio de 2022. <https://www.boe.es/buscar/doc.php?id=BOE-B-2022-16139>

[Real Decreto 401/2023](#), de 29 de mayo, por el que se actualizan los títulos de la formación profesional del sistema educativo de Técnico Superior en Automatización y Robótica Industrial, Técnico Superior en Mantenimiento Electrónico y Técnico Superior en Sistemas Electrotécnicos y Automatizados, de la familia profesional Electricidad y Electrónica, y se fijan sus enseñanzas mínimas.

[Real Decreto 250/2023](#), de 4 de abril, por el que se modifican el Real Decreto 139/2020, de 28 de enero, por el que se establece la estructura orgánica básica de los departamentos ministeriales, y el Real Decreto 645/2020, de 7 de julio, por el que se desarrolla la estructura orgánica básica del Ministerio de Transportes, Movilidad y Agenda Urbana.

CONTENIDO:

- **TECNOLOGÍAS VEHICULARES**
 - [Baterías](#)
 - [Supercondensadores](#)
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 - [Máquinas eléctricas](#)
 - [Convertidores, inversores](#)
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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
WO 2023062138 A1	VOLVO CAR CORP	Battery cell pack for electric vehicle
WO 2023061849 A1	JAGUAR LAND ROVER LTD	Harness assembly
WO 2023083751 A1	VITESCO TECH GMBH	Method and device for balancing rechargeable battery cells of a rechargeable battery module
WO 2023062235 A1	JAGUAR LAND ROVER LTD	Harness assembly
WO 2023083532 A1	KAUTEX TEXTRON GMBH & CO KG	Battery casing shell with improved temperature resistance for a traction battery
WO 2023173291 A1	NINGDE AMPEREX TECH LIMITED	Electrochemical device and electronic device
WO 2023084003 A1	DUKOSI LTD	An auxiliary device for monitoring an electric battery system
WO 2023052236 A1	HELLA GMBH & CO KGAA	Battery management system for a battery storage device, assembly, and method
WO 2023055237 A1	LIONVOLT B V	Hybrid solid electrolyte and battery comprising hybrid solid electrolyte
WO 2023062230 A1	JAGUAR LAND ROVER LTD	Voltage measurement connector
WO 2023061685 A1	BAYERISCHE MOTOREN WERKE AG	Thermal management system for a motor vehicle
WO 2023062045 A1	VALEO KLIMASYSTEME GMBH	Heat-exchanger device for cooling battery cells in a vehicle
WO 2023052736 A1	ARKEMA FRANCE	Solid electrolyte
WO 2023088997 A1	WEBASTO SE	Device for controlling the temperature of a vehicle battery
WO 2023104503 A1	BAYERISCHE MOTOREN WERKE AG	High-voltage battery for a vehicle, and vehicle
WO 2023117162 A1	AUDI AG	Coolant circuit for optimized thermal management for an at least partially electrically operated motor vehicle
WO 2023117634 A1	SOLVAY	Lithium secondary batteries
WO 2023104522 A1	BAYERISCHE MOTOREN WERKE AG	Battery bank with a safety device and method for triggering the safety device
WO 2023054443 A1	HONDA MOTOR CO LTD	Battery characteristic estimating device, battery characteristic estimating method, and program
WO 2023117522 A1	RENAULT SAS	Method for regulating a pressure of a dielectric liquid circulating within a cooling system
WO 2023118380 A1	PLASTIC OMNIUM CLEAN ENERGY SYSTEMS RES	Battery sub-module for a motor vehicle
WO 2023121838 A1	QUANTUMSCAPE BATTERY INC	Catholytes for a solid-state battery
WO 2023054455 A1	FUJIFILM CORP	Sheet for electrode, all-solid secondary battery, and methods for producing sheet for electrode, electrode sheet, and all-solid secondary battery
WO 2023085538 A1	SAMSUNG SDI CO LTD	Secondary battery
WO 2023088955 A1	NORTHVOLT REVOLT AB	Fluoride removal process
WO 2023076011 A1	LIVENT USA CORP	Dry process for forming an electrode
WO 2023093944 A1	VISSMANN CLIMATE SOLUTIONS SE	Building services system
WO 2023104523 A1	BAYERISCHE MOTOREN WERKE AG	Battery storage device with a safety device, and method for triggering the safety device
WO 2023053692 A1	HITACHI LTD	Power management system and power management method
WO 2023063635 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising same
WO 2023066985 A1	JAGUAR LAND ROVER LTD	Battery module

WO 2023085768 A1	LG ENERGY SOLUTION LTD	Battery cell side penetration test device and battery cell penetration test method using same
WO 2023094788 A1	CIRRUS LOGIC INT SEMICONDUCTOR LTD	Charging cells in a battery pack
WO 2023085706 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack including same
WO 2023085810 A1	LG ENERGY SOLUTION LTD	Heat radiation member and battery pack comprising same
WO 2023085665 A1	LG ENERGY SOLUTION LTD	Jelly-roll with improved electrolyte impregnation property, and cylindrical battery cell, battery pack, and vehicle comprising same
WO 2023094263 A1	VALEO SYSTEMES THERMIQUES	Heat exchanger of an electrical and/or electronic element for a motor vehicle
WO 2023117556 A1	RENAULT SAS	Method and system for managing a battery device of an electric or hybrid vehicle containing a voltage measurement of the cells connected to an interconnection bar
WO 2023052748 A1	DYSON TECHNOLOGY LTD	Solid-state electrochemical cell
WO 2023072472 A1	MANN & HUMMEL GMBH	Method for calculating a filter load estimation, system for cleaning environmental air, and vehicle comprising the same
WO 2023080998 A1	PACIFIC IND DEVELOPMENT CORPORATION	Rechargeable lithium cells with pre-lithiated cathode
WO 2023089090 A1	POLESTAR PERFORMANCE AB	Cell-to-pack fixation system and method
WO 2023088936 A1	WEBASTO SE	Multi-battery-pack system for providing energy for a vehicle, and method for equalizing the charge of a such a system
WO 2023117633 A1	SOLVAY	Lithium secondary batteries
WO 2023062089 A1	ACCUMULATEURS FIXES	Dry-processed insulating film for electrode edges
WO 2023076692 A1	SOLID POWER OPERATING INC	Protected electrode structures for solid-state cells
WO 2023094475 A1	LILIUM EAIRCRAFT GMBH	Laminated film for packaging of pouch-type battery cells, pouch-type battery cell and battery
WO 2023072544 A1	VALEO SYSTEMES THERMIQUES	Method for controlling a thermal management device
WO 2023118772 A1	RENAULT SAS	Electrode material coated with a specific compound
WO 2023164843 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric device, and manufacturing method and manufacturing device for battery
WO 2023083801 A1	UNIV MONTREAL	Thermoplastic vulcanizate compositions as solid polymer electrolytes
WO 2023084185 A1	UNIV COURT UNIV ST ANDREWS	Layered sodium metal oxides for na-ion batteries
WO 2023094465 A1	VOLVO CAR CORP	Cooling system for single and multi-bay ev structural batteries
WO 2023105455 A1	ABB SCHWEIZ AG	Energy distribution system and method of controlling the distribution of energy
WO 2023117222 A1	BAYERISCHE MOTOREN WERKE AG	Protective device for a high-voltage battery in electrified motor vehicles
WO 2023088818 A1	HELLA GMBH & CO KGAA	Energy store, method for producing an energy store and vehicle
WO 2023072343 A1	GROB GMBH & CO KG	Method and device for producing z-folded cell stacks
WO 2023099470 A1	VITO NV	A battery cell comprising an anode and a method for manufacturing thereof
WO 2023117297 A1	NOLAX AG	Composite material as heat-protection, flame-retardant and/or smoke-control material
WO 2023155071 A1	INVENTUS POWER INC	Management of battery packs
WO 2023052386 A1	AUTOTECH ENG SL	Plug for a battery box floor for electric vehicles
WO 2023054333 A1	MAXELL LTD	All-solid-state battery
WO 2023083309 A1	HUAWEI TECH CO LTD	Battery, battery module, battery system, and battery thermal anomaly alarm method
WO 2023085895 A1	LG ENERGY SOLUTION LTD	Electrode and electrode manufacturing method
WO 2023054579 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2023114549 A1	SOLID POWER OPERATING INC	Solid state electrolyte and method of production
WO 2023111083 A1	RHODIA OPERATIONS	Solid material comprising li, mg, p, s and halogen elements
WO 2023110776 A1	BOSCH GMBH ROBERT	Method for charging and operating a battery, device, and use thereof
WO 2023053771 A1	PANASONIC IP MAN CO LTD	Lithium-ion secondary battery

WO 2023066263 A1	HUAWEI TECH CO LTD	First electrode sheet, bare battery cell, battery, and electronic device
WO 2023069415 A1	CADENZA INNOVATION INC	Battery systems with pouch cells
WO 2023094416 A1	POLESTAR PERFORMANCE AB	System and method for rapidly discharging a battery cell during a thermal event
WO 2023105987 A1	GS YUASA INT LTD	Power storage element
WO 2023106771 A1	LG ENERGY SOLUTION LTD	Battery pack and manufacturing method therefor
WO 2023120545 A1	IBIDEN CO LTD	Insulating sheet and battery pack
WO 2023054151 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2023110830 A1	EV METALS UK LTD	Cathode material
WO 2023054411 A1	NITTO DENKO CORP	Thermally insulating material for battery, and non-aqueous electrolyte secondary battery
WO 2023063332 A1	GS YUASA INT LTD	Power storage element
WO 2023078810 A1	VALEO SYSTEMES THERMIQUES	Thermal control device, in particular cooling device
WO 2023082925 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode material, positive electrode plate, secondary battery, battery module, battery pack, and electrical device
WO 2023103343 A1	TIANMULAKE EXCELLENT ANODE MAT CO LTD	Multi-layer composite material for secondary lithium-ion battery, preparation method therefor and use thereof
WO 2023113933 A1	DOW SILICONES CORP	Laminate barrier with silicone foam layer defining voids containing endothermic material
WO 2023111623 A1	DOW GLOBAL TECHNOLOGIES LLC	
WO 2023111623 A1	VOLTWALL LLC	Battery unit
WO 2023110593 A1	THERMO FISHER SCIENT MESSTECHNIK GMBH	Calibration sample set for radiometric gauges and method for preparing calibration standards for web gauging of lithium ion battery electrode material
WO 2023052910 A1	KPIT TECH LIMITED	System and method for estimating state of health and remaining useful life of a battery
WO 2023053640 A1	PANASONIC IP MAN CO LTD	Battery and method for manufacturing battery
WO 2023063634 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising same
WO 2023073089 A1	UMICORE NV	A powder for use in the negative electrode of a battery, a method for preparing such a powder and a battery comprising such a powder
WO 2023072917 A1	CARBONX B V	New conductive additive in lithium and sodium batteries
WO 2023078811 A1	VALEO SYSTEMES THERMIQUES	Thermal control device, in particular cooling device
WO 2023121462 A1	LEYDENJAR TECH B V	Solid state lithium-ion batteries comprising a nanoporous silicon anode
WO 2023158065 A1	UNIV ULSAN FOUND IND COOP	System and method for randomly aligning soc of reusable battery
WO 2023050078 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electrical apparatus, method and apparatus for preparing battery
WO 2023053668 A1	MURATA MANUFACTURING CO	Battery pack, electric tool, and electric vehicle
WO 2023082847 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, powered apparatus and trapping agent providing method
WO 2023110774 A1	IEE SA	Pressure sensing cell for accurate pressure sensing in a battery pack
WO 2023121275 A1	LG ENERGY SOLUTION LTD	Cathode slurry composition, cathode manufactured using same, and lithium secondary battery
WO 2023054303 A1	PANASONIC IP MAN CO LTD	Positive electrode for secondary battery, and secondary battery
WO 2023066342 A1	BEIJING YUCHENG TECH CO LTD	Modified composite separator and preparation method therefor
WO 2023062473 A1	SEMICONDUCTOR ENERGY LAB	Battery control system and vehicle
WO 2023063633 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising same
WO 2023066469 A1	REPSOL SA	Controlling li-ion battery systems

WO 2023072444 A1	BOSCH GMBH ROBERT	Method for operating a battery system, and battery system
WO 2023063785 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023068237 A1	FUJIFILM CORP	Inorganic solid electrolyte-containing composition, sheet for all-solid secondary battery, all-solid secondary battery, and method for manufacturing sheet for all-solid secondary battery and all-solid secondary battery
WO 2023100335 A1	HONDA MOTOR CO LTD	Authentication system and authentication method
WO 2023054300 A1	PANASONIC IP MAN CO LTD	Positive electrode for secondary battery, and secondary battery
WO 2023062990 A1	DENSO CORP	Battery management device
WO 2023063779 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023063637 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising same
WO 2023108099 A1	FED MOGUL POWERTRAIN LLC	Electric vehicle battery and battery cell interface material therefor
WO 2023111070 A1	INNOLITH TECH AG	Rechargeable battery cell
WO 2023078891 A1	SOLVAY	Secondary batteries with protective layer containing (per)fluoroelastomer
WO 2023084353 A1	SEMICONDUCTOR ENERGY LAB	Secondary battery and electronic apparatus
WO 2023087176 A1	HUAWEI TECH CO LTD	Temperature measurement system and method
WO 2023098878 A1	DONGGUAN POWERAMP TECH LIMITED	Battery pack, method for manufacturing battery pack, and electric apparatus
WO 2023157377 A1	JX METALS CORP	Recovery method for extractant in aqueous solution and separation and recovery method for metal from metal aqueous solution
WO 2023072547 A1	LILIUM EAIRCRAFT GMBH	Battery cell comprising degassing channels and/or paths of weakness
WO 2023078712 A1	RENAULT SAS	System for cooling a traction battery in the event of thermal runaway
WO 2023104581 A1	MANN & HUMMEL GMBH	Air delivery module and battery casing for a battery pack
WO 2023054148 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2023057515 A1	SPEIRA GMBH	Battery cell housing made of an aluminium alloy strip having a high recycling content
WO 2023087301 A1	DONGGUAN AMPEREX TECH LTD	Electrochemical apparatus and electronic device containing said electrochemical apparatus
WO 2023090977 A2	KIM YONG SANG	Secondary battery electrode coated with nano metal particles and method for manufacturing same
WO 2023114536 A1	SOLID POWER OPERATING INC	System and methods for a prelithiated electrode for an electrochemical cell
WO 2023105903 A1	JX NIPPON MINING & METALS CORP	Metal leaching method
WO 2023118095 A1	NORCSI GMBH	Silicon anode for lithium-ion batteries, and method for producing same
WO 2023054308 A1	PANASONIC IP MAN CO LTD	Non-aqueous electrolyte secondary battery
WO 2023063330 A1	GS YUASA INT LTD	Power storage element
WO 2023063636 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising same
WO 2023063008 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2023085829 A1	LG ENERGY SOLUTION LTD	Cutting device, electrode assembly, battery cell, electrode assembly processing device, battery pack and vehicle comprising same, and method for manufacturing battery cell
WO 2023110596 A1	RENAULT SAS	Battery management system and method for equalizing the charges of the accumulator cells of the battery
	NISSAN MOTOR	
WO 2023111072 A1	INNOLITH TECH AG	Rechargeable battery cell
WO 2023120340 A1	IBIDEN CO LTD	Heat transfer suppression sheet and battery pack
WO 2023054149 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2023063728 A1	LG ENERGY SOLUTION LTD	Separator for electrochemical device and electrochemical device comprising same
WO 2023111408 A1	PSA AUTOMOBILES SA	Method for monitoring the operation of temperature sensors of battery modules
WO 2023084947 A1	JFE STEEL CORP	Valuable element recovery method

WO 2023059070 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023063727 A1	LG ENERGY SOLUTION LTD	Method of preparing gel polymer electrolyte secondary battery and gel polymer electrolyte secondary battery prepared therefrom
WO 2023060393 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery self-discharge detection method, and circuit and device
WO 2023062423 A1	VIDYASIRIMEDHI INSTITUTE OF SCIENCE AND TECH VISTEC	Cathode active material for lithium-ion battery and method for preparing said active material, and cathode comprising said active material and method for preparing said cathode
WO 2023106378 A1	UNIV TOKYO SCIENCE FOUND	Electronic appliance and analysis method
	MURATA MANUFACTURING CO	
WO 2023054915 A1	LG ENERGY SOLUTION LTD	Separator laminate, electrode assembly comprising same, and method for manufacturing electrode assembly
WO 2023103700 A1	BTR NANO TECH CO LTD	Nickel-rich positive electrode material, preparation method therefor, and lithium ion battery
WO 2023058606 A1	UNIV TOKYO	Electrolyte solution for lithium metal secondary batteries, lithium metal secondary battery comprising said electrolyte solution, and method for evaluating electrolyte solution for lithium metal secondary batteries
WO 2023063685 A1	LG ENERGY SOLUTION LTD	Battery management device and method for operating same
WO 2023082152 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electric device, and method and apparatus for preparing battery cell
WO 2023106752 A1	LG ENERGY SOLUTION LTD	Apparatus and method for estimating state of battery
WO 2023121089 A1	OCI CO LTD	Negative electrode material for secondary battery, and preparation method thereof
WO 2023054959 A1	LG ENERGY SOLUTION LTD	Method for manufacturing cathode active material for lithium secondary battery, and cathode active material manufactured thereby
WO 2023058294 A1	PANASONIC IP MAN CO LTD	Battery and method for manufacturing battery
WO 2023076562 A1	UNIV TEXAS	A test system and methods for determining battery thermal runaway characteristics
WO 2023077330 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrolyte, secondary battery, and electric device comprising secondary battery
WO 2023055183 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2023051146 A1	BYD CO LTD	Vehicle thermal management system and vehicle
WO 2023052837 A1	VIDYASIRIMEDHI INSTITUTE OF SCIENCE AND TECH VISTEC	Lithium-ion battery and method for preparing the same
WO 2023058603 A1	MURATA MANUFACTURING CO	Negative electrode for secondary battery and secondary battery
WO 2023063532 A1	LG ELECTRONICS INC	Energy storage system
WO 2023063783 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023065193 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electrical device, and method and equipment for manufacturing battery cell
WO 2023102733 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery management system and update method therefor, and master node, slave node and storage medium
WO 2023051018 A1	MURATA MANUFACTURING CO	Additive for lithium-ion battery electrolyte, electrolyte, and lithium-ion secondary battery
	ZHU CHENG	
WO 2023057837 A1	3M INNOVATIVE PROPERTIES COMPANY	Cooling plate assembly, method of making the same, and curable composition
WO 2023058774 A1	SEC CARBON LTD	Graphite particles
WO 2023063591 A1	LG ENERGY SOLUTION LTD	Battery module having excellent impact resistance
WO 2023070042 A1	ARCIMOTO INC	Battery system
WO 2023080286 A1	L&F CO LTD	Cathode active material for secondary battery
WO 2023080629 A1	LG ENERGY SOLUTION LTD	Cathode active material for secondary battery

WO 2023088052 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, winding method, device, battery cell, battery, and electrical apparatus
WO 2023063787 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023069783 A1	SOELECT INC	Hydrophilic lithium metal composite anode and methods of making same
WO 2023080752 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023090368 A1	MURATA MANUFACTURING CO	Secondary battery, battery pack, electronic device, power tool, electric aircraft, and electric vehicle
WO 2023106760 A1	LG ENERGY SOLUTION LTD	Alignment apparatus and assembly system of battery module assembly comprising alignment apparatus
WO 2023121332 A1	LG ENERGY SOLUTION LTD	Positive electrode for lithium secondary battery, and lithium secondary battery comprising same
WO 2023121185 A1	LG ENERGY SOLUTION LTD	Electrode driving device
WO 2023121224 A1	LG ENERGY SOLUTION LTD	Positive electrode slurry composition, positive electrode manufactured using same, and lithium secondary battery
WO 2023149534 A1	FDK CORP	Zinc battery
WO 2023054940 A1	LG ENERGY SOLUTION LTD	Negative active material, method for manufacturing same, and negative electrode and secondary battery comprising same
WO 2023057135 A1	KAUTEX TEXTRON GMBH & CO KG	Battery casing having a relief and a shielding layer, tool, method and traction battery
WO 2023058295 A1	PANASONIC IP MAN CO LTD	Battery and method for producing battery
WO 2023065300 A1	HUAWEI TECH CO LTD	Thermal management apparatus, control method of thermal management apparatus, and vehicle
WO 2023070254 A1	T GLOBAL TECH CO LTD	Double-layer thermal interface material structure, manufacturing method therefor, and battery device having same
WO 2023082068 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly and manufacturing method therefor, battery cell, battery, and electric device
WO 2023089874 A1	PANASONIC IP MAN CO LTD	Battery, method for producing battery, and circuit board
WO 2023101352 A1	LG ENERGY SOLUTION LTD	Cylindrical battery and current collector applied thereto, and battery pack and vehicle including such cylindrical battery
WO 2023106882 A1	LG ENERGY SOLUTION LTD	Anode active material, anode slurry including same, anode including same, secondary battery including same, and method for preparing anode active material
WO 2023108106 A1	ASPEN AEROGELS INC	Composite materials providing improved battery performance and methods of manufacture thereof
WO 2023112405 A1	VEHICLE ENERGY JAPAN INC	Solid electrolyte battery and method for producing solid electrolyte battery
WO 2023059072 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023058689 A1	NITTO DENKO CORP	Thermal insulation material and method for producing thermal insulation material
WO 2023071736 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method for recovering capacity of lithium-ion secondary battery
WO 2023090219 A1	MAFTEC CO LTD	Inorganic fiber blanket, laminate, battery pack unit, and electric mobility
WO 2023110183 A1	VALEO SYSTEMES THERMIQUES	Cooling plate
WO 2023120733 A1	APB CORP	Battery structure
WO 2023092240 A1	LASERAX INC	Battery assembly and method for assembling a battery assembly
WO 2023095889 A1	UNIV OSAKA PUBLIC CORP	Oxide-based positive electrode active material and use of same
WO 2023097507 A1	HUAWEI TECH CO LTD	Battery safety early warning method and apparatus
WO 2023106128 A1	PANASONIC IP MAN CO LTD	Battery
WO 2023106416 A1	JERA CO INC	Storage battery recycling device
WO 2023120098 A1	NGK INSULATORS LTD	Method for recycling lithium-ion secondary battery
WO 2023119949 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2023120732 A1	APB CORP	Battery module

WO 2023082153 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electrical device, and battery cell preparation method and apparatus
WO 2023082505 A1	INST PHYSICS CAS	Oxide composite positive electrode material coated with borate in situ, preparation method, and use
WO 2023090367 A1	MURATA MANUFACTURING CO	Secondary battery, battery pack, electronic device, power tool, electrically powered aircraft, and electric vehicle
WO 2023063726 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery and manufacturing method therefor
WO 2023063531 A1	LG ELECTRONICS INC	Energy storage system
WO 2023073480 A1	SEMICONDUCTOR ENERGY LAB	Lithium ion battery
WO 2023082923 A1	GUANGZHOU AUTOMOBILE GROUP CO	Electric automobile low-temperature driving thermal management control method, system, and automobile
WO 2023094946 A1	SEMICONDUCTOR ENERGY LAB	Battery, electronic device, and vehicle
WO 2023095411 A1	DENSO TEN LTD	Battery monitoring system, battery monitoring device, and battery monitoring method
	DENSO CORP	
WO 2023096335 A1	LG ENERGY SOLUTION LTD	Apparatus and method for diagnosing abnormality of battery
WO 2023110823 A1	UMICORE NV	A negative electrode comprising a metal substrate and a protective layer
WO 2023119967 A1	MURATA MANUFACTURING CO	Power supply system and electronic device
WO 2023120497 A1	NIPPON ELECTRIC GLASS CO	All-solid-state sodium-ion secondary battery
WO 2023121278 A1	POSCO CO LTD	Heat-controllable battery pack
WO 2023058557 A1	MURATA MANUFACTURING CO	Secondary battery and method for producing same
WO 2023059028 A1	LG ENERGY SOLUTION LTD	Electrode assembly, manufacturing method for same, and battery cell comprising same
WO 2023063778 A1	LG CHEMICAL LTD	Cathode active material for lithium secondary battery and method for manufacturing same
WO 2023063648 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2023089875 A1	PANASONIC IP MAN CO LTD	Battery, method for manufacturing battery, and circuit board
WO 2023096390 A1	LG ENERGY SOLUTION LTD	Fixing structure of electrode terminal, and battery, battery pack and vehicle including same
WO 2023068312 A1	TORAY INDUSTRIES	Polymer ion conductive membrane, polymer ion conductive membrane for secondary batteries, composite ion permeable membrane, electrode complex, and secondary battery
WO 2023074845 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2023074213 A1	ABRI CO LTD	Positive electrode for lithium sulfur batteries, and lithium sulfur battery
WO 2023090333 A1	GS YUASA INT LTD	Nonaqueous electrolyte power storage element
WO 2023106773 A1	LG ENERGY SOLUTION LTD	Assembly system and assembly method of battery module assembly
WO 2023120187 A1	PANASONIC IP MAN CO LTD	Battery abnormality detecting system, battery abnormality detecting method, and battery abnormality detecting program
WO 2023120984 A1	LG ENERGY SOLUTION LTD	Separator for electrochemical device and electrochemical device comprising same
WO 2023059073 A1	LG ENERGY SOLUTION LTD	Secondary battery comprising low-efficiency cathode
WO 2023080216 A1	DAINIPPON PRINTING CO LTD	Insulating film, all-solid-state battery, and method for manufacturing all-solid-state battery
WO 2023120032 A1	PANASONIC IP MAN CO LTD	Secondary battery separator, production method for same, and secondary battery
WO 2023121147 A1	POSCO HOLDINGS INC	Cathode active material for lithium secondary battery, preparation method therefor, and lithium secondary battery comprising same
WO 2023155623 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery and electric device
WO 2023050377 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method, apparatus and system for determining state of charge
WO 2023058455 A1	GS YUASA INT LTD	Method for producing power storage element, and liquid injection device

WO 2023090369 A1	MURATA MANUFACTURING CO	Secondary battery, battery pack, electronic device, electric tool, electric aircraft, and electric vehicle
WO 2023090395 A1	NIPPON STEEL CORP	Cooling floor member
WO 2023121188 A1	LG ENERGY SOLUTION LTD	Appearance inspection system and method
WO 2023059074 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023069740 A1	UNIV LELAND STANFORD JUNIOR	Electrolyte solvents and methods for lithium meta and lithium ion batteries
WO 2023080515 A1	LG CHEMICAL LTD	Positive electrode current collector having coated adhesion-promoting layer, positive electrode for lithium secondary battery comprising same, and lithium secondary battery
WO 2023094617 A1	FRITZMEIER GEORG GMBH & CO KG	Covering structure and method and pre-forming tool for producing a covering structure
WO 2023106689 A1	LG ENERGY SOLUTION LTD	Method and apparatus for diagnosing battery cell
WO 2023112899 A1	RESONAC CORP	Cooling structure
WO 2023121365 A1	LG CHEMICAL LTD	Cathode active material for lithium secondary battery and method for manufacturing same
WO 2023121255 A1	LG ENERGY SOLUTION LTD	Battery module, and battery pack and vehicle including same
WO 2023082262 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium plating detection method for battery pack, computer-readable storage medium and electric apparatus
WO 2023095108 A1	HOSANGADY ABISHEK	A battery pack casing
WO 2023096201 A1	LG ENERGY SOLUTION LTD	Method for preparing positive electrode active material for lithium secondary battery, and positive electrode active material prepared thereby
WO 2023101422 A1	LG ENERGY SOLUTION LTD	Resistance-reduced cylindrical battery
WO 2023108661 A1	MICROVAST ADVANCED MAT INC	Non-aqueous electrolyte and lithium ion secondary battery
WO 2023120281 A1	DENSO CORP	Cell monitoring device, and battery management unit
WO 2023120883 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery and method for producing lithium secondary battery
WO 2023067359 A1	NEXEON LTD	Electroactive materials for metal-ion batteries
WO 2023074846 A1	PANASONIC IP MAN CO LTD	Lithium secondary battery
WO 2023085625 A1	LG ENERGY SOLUTION LTD	Apparatus for cutting separator
WO 2023090370 A1	MURATA MANUFACTURING CO	Secondary battery, battery pack, electronic device, electric tool, electric aircraft and electric vehicle
WO 2023120011 A1	NGK INSULATORS LTD	System for supporting reuse of lithium ion secondary battery
WO 2023120414 A1	NIPPON ELECTRIC GLASS CO	Positive electrode active material for sodium-ion secondary cell
WO 2023060554 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrolyte, secondary battery, and power device
WO 2023075420 A1	LG ENERGY SOLUTION LTD	Manufacturing method of electrode assembly
WO 2023089200 A2	OERLIKON SURFACE SOLUTIONS AG PFAEFFIKON	In-line coating apparatus for the manufacture of parts of a solid-state cell
WO 2023106758 A1	POSCO HOLDINGS INC	Method for recovering lithium from waste lithium battery
WO 2023075573 A1	LG ENERGY SOLUTION LTD	Negative electrode with single-walled carbon nanotubes and secondary battery comprising same
WO 2023087927 A1	HUAWEI TECH CO LTD	Battery, and preparation method and system for sensor implanted inside battery
WO 2023090048 A1	MURATA MANUFACTURING CO	Negative electrode active material and solid-state battery containing negative electrode active material
WO 2023096346 A1	LG ENERGY SOLUTION LTD	Negative electrode active material, negative electrode, and secondary battery
WO 2023106675 A1	LG ENERGY SOLUTION LTD	Battery pressure measuring sensor and apparatus for measuring pressure of battery including same
WO 2023121315 A1	LG ENERGY SOLUTION LTD	Cathode slurry composition, and lithium secondary battery manufactured using same
WO 2023121102 A1	LG ENERGY SOLUTION LTD	Battery assembly with reinforced safety

WO 2023050923 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, and electric device
WO 2023059173 A1	LG ENERGY SOLUTION LTD	Separator for secondary battery
WO 2023071735 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Capacity recovery method for lithium-ion secondary battery
WO 2023078066 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electrical device, detection method, and detection module
WO 2023085639 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery having enhanced high-temperature safety
WO 2023087196 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electronic apparatus, and preparation method and manufacturing system for battery
WO 2023090950 A1	LG ENERGY SOLUTION LTD	Composition for cathode active material layer, and lithium secondary battery
WO 2023092459 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, battery cell, battery, and electrical device
WO 2023055216 A1	LG ENERGY SOLUTION LTD	Negative electrode pre-dispersion solution, negative electrode composition including same, negative electrode for lithium secondary battery including negative electrode composition, lithium secondary battery including negative electrode, and method for producing negative electrode composition
WO 2023075244 A1	LG ENERGY SOLUTION LTD	Battery management device and operation method thereof
WO 2023112371 A1	HITACHI ASTEMO LTD	Battery data transmission device, battery management device, battery data transmission method, and battery data transmission system
WO 2023119945 A1	MURATA MANUFACTURING CO	Secondary battery electrolyte solution and secondary battery
WO 2023120435 A1	PANASONIC HOLDINGS CORP	Battery pack
WO 2023121135 A1	POSCO CO LTD	Battery case
WO 2023101459 A1	SAMSUNG ELECTRO MECH	Solid electrolyte and all-solid-state battery including the same
WO 2023111417 A1	ARKEMA FRANCE	Method for preparing lithium bis(fluorosulfonyl)imide
WO 2023119947 A1	MURATA MANUFACTURING CO	Electrolytic solution for lithium ion secondary battery and lithium ion secondary battery
WO 2023090659 A1	LG ENERGY SOLUTION LTD	Device for measuring insulation resistance and battery system including same
WO 2023093893 A1	LANXI ZHIDE ADVANCED MAT CO LTD	Nano-silicon-oxygen-carbon structure composite material and preparation method therefor, negative electrode and electrochemical device
WO 2023095674 A1	PANASONIC IP MAN CO LTD	Battery abnormality detection system, battery abnormality detection method, and battery abnormality detection program
WO 2023119834 A1	KUBOTA KK	Electric work vehicle
WO 2023121155 A1	POSCO HOLDINGS INC	Positive electrode active material for rechargeable lithium battery, positive electrode including same, and rechargeable lithium battery including same
WO 2023075379 A1	LG ENERGY SOLUTION LTD	Additive for non-aqueous electrolyte, non-aqueous electrolyte comprising same, and lithium secondary battery
WO 2023114345 A1	MAGNA INT INC	Integrated cooling plates with battery enclosures
WO 2023059016 A1	LG ENERGY SOLUTION LTD	Negative electrode for lithium secondary battery, method for manufacturing negative electrode for lithium secondary battery, and lithium secondary battery comprising negative electrode
WO 2023070600 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery, battery module, battery pack, and electrical device
WO 2023092289 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, power consuming device, and method for manufacturing battery cell
WO 2023101287 A1	LG ENERGY SOLUTION LTD	Bonding state inspection apparatus and bonding state inspection method using same
WO 2023121538 A1	SCANIA CV AB	Method for degradation diagnosis of an electrochemical cell
WO 2023068630 A1	L&F CO LTD	Cathode active material for secondary battery
WO 2023094942 A1	SEMICONDUCTOR ENERGY LAB	Secondary battery and electronic device

WO 2023101426 A1	LG ENERGY SOLUTION LTD	Anode for lithium secondary battery, manufacturing method for anode for lithium secondary battery, and lithium secondary battery including anode
WO 2023112503 A1	MURATA MANUFACTURING CO	Exterior material, solid-state battery, and electronic device
WO 2023120120 A1	ZEON CORP	Binder composition for all-solid-state secondary battery, slurry composition for all-solid-state secondary battery, functional layer for all-solid-state secondary battery, and all-solid-state secondary battery
WO 2023121248 A1	LG ENERGY SOLUTION LTD	Secondary battery
WO 2023068671 A1	LG ENERGY SOLUTION LTD	Secondary battery, manufacturing method thereof, and device including same
WO 2023086884 A1	COMSTOCK IP HOLDINGS LLC	Li-ion battery recycling process and system for black mass fractionation and recovery of specific materials
WO 2023092441 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell and manufacturing method and device therefor, battery, and electrical device
WO 2023094240 A1	NORTHVOLT AB	A method of arranging cells in a battery pack and a battery pack
WO 2023096096 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2023069319 A1	FLYER NEXT LLC	Configurable vehicle battery backplane and modules and methods of operating the same
WO 2023092529 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Housing and manufacturing method and system therefor, battery cell, battery, and electrical device
WO 2023068611 A1	LG ENERGY SOLUTION LTD	Lfp battery cell that enables easy measurement of soc
WO 2023075362 A1	LG ENERGY SOLUTION LTD	Non-aqueous electrolyte for lithium secondary battery, and lithium secondary battery comprising same
WO 2023090847 A1	LG ENERGY SOLUTION LTD	Anode and secondary battery comprising same
WO 2023092301 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery charging method and apparatus, and computer storage medium and electronic device
WO 2023108570 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery and manufacturing method therefor, and electric device
WO 2023120688 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2023120978 A1	KOREA INST SCI & TECH	Method for manufacturing composite solid electrolyte sheet
WO 2023127905 A1	IBIDEN CO LTD	Heat transfer suppressing sheet, and battery assembly
WO 2023063540 A1	LG ENERGY SOLUTION LTD	Battery manufacturing method
WO 2023082270 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery heating circuit and control method thereof, battery, and electric vehicle
WO 2023090953 A1	LG ENERGY SOLUTION LTD	Electrode assembly and secondary battery comprising same
WO 2023092400 A1	HUAWEI DIGITAL POWER TECH CO LTD	Heat exchange device, charging station, heat exchange control method, and vehicle
WO 2023100018 A1	SEMICONDUCTOR ENERGY LAB	Secondary battery and electronic apparatus
WO 2023120687 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2023124846 A1	BTR NEW MAT GROUP CO LTD	Negative electrode material and preparation method therefor, and lithium ion battery
	DINGYUAN NEW ENERGY TECH CO LTD	
WO 2023059101 A1	LG ENERGY SOLUTION LTD	Button-type secondary battery
WO 2023059107 A1	LG ENERGY SOLUTION LTD	Button-type secondary battery
WO 2023076696 A1	SAKUU CORP	Hybrid solid-state cell with a 3d porous cathode and/or anode structure
WO 2023096404 A1	LG ENERGY SOLUTION LTD	Negative electrode active material, negative electrode comprising same, secondary battery comprising same, and method for manufacturing negative electrode active material
WO 2023112394 A1	MURATA MANUFACTURING CO	Charging device, server, and diagnostic system

WO 2023120054 A1	PANASONIC IP MAN CO LTD	Anomaly detection system, anomaly detection method, and anomaly detection program
WO 2023121381 A1	KOREA INST ENERGY RES	Phase-controlled nanosheet laminated structure, hybrid composite, and method for manufacturing same
WO 2023070263 A1	T GLOBAL TECH CO LTD	Multilayer thermal interface material structure and preparation method therefor, and battery apparatus having same
WO 2023082557 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Control system and charging and discharging control system
WO 2023090180 A1	HITACHI HIGH TECH CORP	Battery management device, battery management method, and battery management program
WO 2023090887 A1	LG ENERGY SOLUTION LTD	Pouch-type lithium secondary battery
WO 2023092435 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell heating assembly, battery module, and vehicle
WO 2023100016 A1	CPS TECH HOLDINGS LLC	Cooling plate and battery pack including the same
	CLARIOS ADVANCED SOLUTIONS GMBH	
WO 2023114294 A1	UNIV TEXAS	Localized saturated electrolytes and rechargeable batteries containing the same
WO 2023114873 A1	ZERO NOX INC	Electric vehicle battery conditioning
WO 2023060656 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electrical device, and method and device for preparing battery
WO 2023068688 A1	LG ENERGY SOLUTION LTD	Battery module with reinforced safety
WO 2023075442 A1	LG ENERGY SOLUTION LTD	Anode and secondary battery comprising same
WO 2023070552 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method and apparatus for testing coverage of jelly roll of battery during winding, and device
WO 2023090830 A1	POSCO CO LTD	Movable battery pack processing device and processing method
WO 2023092338 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, power consuming device, and method and device for preparing battery cell
WO 2023096130 A1	LG ENERGY SOLUTION LTD	Battery for testing short circuit, manufacturing method therefor, and battery safety analysis method
WO 2023121368 A1	LG ENERGY SOLUTION LTD	Electrolyte for lithium secondary battery and lithium secondary battery comprising same
WO 2023068900 A1	LG ENERGY SOLUTION LTD	Cylindrical secondary battery
WO 2023075515 A1	LG ENERGY SOLUTION LTD	Cathode material, cathode comprising same and lithium secondary battery
WO 2023080643 A1	LG ENERGY SOLUTION LTD	Cathode material, and cathode and lithium secondary battery comprising same
WO 2023121067 A1	LG ENERGY SOLUTION LTD	Battery pack and vehicle comprising same
WO 2023066004 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Negative electrode plate, preparation method therefor, secondary battery containing same, battery module, battery pack, and electrical device
WO 2023090710 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2023090948 A1	LG ENERGY SOLUTION LTD	Composition for cathode active material layer, and lithium secondary battery
WO 2023096406 A1	LG ENERGY SOLUTION LTD	Anode active material, anode comprising same, secondary battery comprising same, and method for manufacturing anode active material
WO 2023096431 A1	KOREASIMULATOR CO LTD	Fire extinguishing device using salt water tank for battery for testing high-capacity charging/discharging
WO 2023068875 A1	LG ENERGY SOLUTION LTD	Electrode assembly and battery cell including same
WO 2023108272 A1	MAGNA INT INC	Structural integrated battery pack
WO 2023059069 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery

WO 2023087285 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electric device, and method and apparatus for manufacturing battery cell
WO 2023096052 A1	KANGWON NATIONAL UNIV INDUSTRY COOPERATION FOUNDATION	Anode active material for lithium secondary battery, preparation method therefor and lithium secondary battery comprising same
WO 2023097427 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric device, and method and apparatus for manufacturing battery
WO 2023121260 A1	LG ENERGY SOLUTION LTD	Battery pack with improved safety
WO 2023082869 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery, method for preparing secondary battery, battery module, battery pack, and power consumption apparatus
WO 2023121257 A1	LG ENERGY SOLUTION LTD	Anode composition, anode comprising same for lithium secondary battery, lithium secondary battery comprising anode, and method for preparing anode composition
WO 2023121218 A1	LG ENERGY SOLUTION LTD	Pre-lithiation method for negative electrode for lithium secondary battery, negative electrode for lithium secondary battery, and lithium secondary battery comprising negative electrode
WO 2023068647 A1	LG ENERGY SOLUTION LTD	Battery module having swelling detection means
WO 2023121261 A1	LG ENERGY SOLUTION LTD	Battery pack
WO 2023096062 A1	LG ENERGY SOLUTION LTD	Riveting structure for electrode terminal, and battery cell, battery pack, and vehicle comprising same
WO 2023101495 A1	L&F CO LTD	Cathode active material having composite coating layer
WO 2023121397 A1	LG ENERGY SOLUTION LTD	Positive electrode and lithium secondary battery manufactured using same
WO 2023063808 A1	LG ENERGY SOLUTION LTD	Electrode assembly, cylindrical battery cell, and battery pack and vehicle comprising same
WO 2023068892 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle comprising same
WO 2023106875 A1	POSCO CHEM CO LTD	Anode active material for lithium secondary battery, preparing method thereof, and lithium secondary battery comprising same
WO 2023112730 A1	NISSAN MOTOR	Battery temperature control method and battery temperature control device
WO 2023058824 A1	SAMSUNG ELECTRO MECH	Solid-state battery
WO 2023087217 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, fabrication method therefor, fabrication device, battery, and electrical apparatus
WO 2023107718 A1	AMPAIRE INC	Lightweight structural vented battery system for electric and hybrid electric vehicles
WO 2023121307 A1	RES INST IND SCIENCE & TECH	Solid electrolyte, method of manufacturing same, and lithium secondary battery comprising same
WO 2023090682 A1	LG ENERGY SOLUTION LTD	Positive electrode for lithium secondary battery and lithium secondary battery comprising same
WO 2023097458 A1	NINGDE AMPEREX TECHNOLOGY LTD	Electrochemical device and electronic device
WO 2023063541 A1	LG ENERGY SOLUTION LTD	Battery and current collector plate applied thereto, and battery pack and vehicle including battery
WO 2023101279 A1	LG ENERGY SOLUTION LTD	Zigzag stacking device
WO 2023121014 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023068891 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle comprising same
WO 2023059075 A1	LG ENERGY SOLUTION LTD	Electrode assembly, cylindrical battery, and system comprising same
WO 2023068890 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle including cylindrical battery
WO 2023121419 A1	LG ENERGY SOLUTION LTD	Battery pack with improved safety
WO 2023068494 A1	LG ENERGY SOLUTION LTD	Electrode assembly, battery, and battery pack and vehicle comprising same
WO 2023060537 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric device, and method and device for preparing battery

WO 2023096076 A1	LG ENERGY SOLUTION LTD	Vr-based simulation method and device for manufacturing secondary batteries
WO 2023096045 A1	SAMSUNG ELECTRONICS CO LTD	Method and electronic device for managing battery
WO 2023097795 A1	GUANGDONG HAOZHI TECH CO LIMITED	Modified current collector for secondary battery
WO 2023062613 A1	LG ENERGY SOLUTION LTD	Electrode assembly and battery cell comprising same
WO 2023119946 A1	MURATA MANUFACTURING CO	Secondary battery electrolyte solution and secondary battery
WO 2023068897 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle including same
WO 2023079242 A2	LISI AUTOMOTIVE	Monitoring the conductivity of an electrical connection between the cells of a traction battery of a motor vehicle
WO 2023068888 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle including same
WO 2023072218 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Device for assembling cell into housing, battery cell assembling device, and cell assembling method
WO 2023090944 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery
WO 2023102917 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Negative electrode active material and preparation method therefor, secondary battery, battery module, battery pack, and power device
WO 2023119948 A1	MURATA MANUFACTURING CO	Secondary battery
WO 2023121390 A1	LG ENERGY SOLUTION LTD	Positive electrode active material, and positive electrode and lithium secondary battery comprising same
WO 2023070399 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric device, and method for manufacturing battery
WO 2023075520 A1	LG ENERGY SOLUTION LTD	Cylindrical secondary battery comprising improved current collector plate, and battery pack and vehicle including same
WO 2023092281 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode slurry, positive electrode plate and battery comprising positive electrode plate
WO 2023050311 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, manufacturing method and manufacturing system therefor, and electric device
WO 2023080566 A1	LG ENERGY SOLUTION LTD	Battery module
WO 2023096066 A1	LG ENERGY SOLUTION LTD	Method and device for simulation of lamination and stack device for secondary battery production
WO 2023113440 A1	UNIV KOREA RES & BUS FOUND	Sulfide-based solid electrolyte for lithium secondary battery, method for preparing same, and electrode comprising same
WO 2023105817 A1	ASAHI CHEMICAL IND	Current separation method for nonaqueous lithium power storage element, prediction method, system and like
WO 2023113283 A1	LG ENERGY SOLUTION LTD	Porous carbon material having impurities removed therefrom, preparation method therefor, cathode for lithium-sulfur battery including carbon material as cathode active material, and lithium-sulfur battery
WO 2023120847 A1	LG ENERGY SOLUTION LTD	Battery system, electric vehicle comprising same, and operation method of electric vehicle
WO 2023050124 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly and manufacturing method and device therefor, battery and electrical apparatus
WO 2023065587 A1	CHINA ENERGY INVESTMENT CORP LTD	Controller for managing charging or discharging of heterogeneous battery pack, system, and method
WO 2023068889 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle including same
WO 2023075230 A1	LG ENERGY SOLUTION LTD	Battery pack
WO 2023092284 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly and manufacturing method therefor, battery cell, battery, and electric apparatus
WO 2023121070 A1	LG ENERGY SOLUTION LTD	Lithium secondary battery with enhanced safety
WO 2023123039 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, manufacturing method therefor, manufacturing device thereof, and electrical apparatus

WO 2023050414 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery, battery module comprising same, battery pack, and electrical device
WO 2023050873 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery processing system and battery processing method
WO 2023077299 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode slurry, positive electrode plate, lithium ion battery, battery module, battery pack, and electrical device
WO 2023115527 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Spinel-type nickel-manganese-lithium-containing composite oxide, preparation method therefor, and secondary battery and electric device comprising same
WO 2023068886 A1	LG ENERGY SOLUTION LTD	Cylindrical secondary battery, and battery pack and vehicle including same
WO 2023090966 A1	LG ENERGY SOLUTION LTD	Method for estimating state of health of lithium-sulfur battery
WO 2023050832 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium ion battery, battery module, battery pack, and electrical device
WO 2023087213 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery pack and electric apparatus using same
WO 2023090927 A1	LG ENERGY SOLUTION LTD	Pouch-type battery cell including sensing member, and battery module including same
WO 2023068895 A1	LG ENERGY SOLUTION LTD	Cylindrical battery, and battery pack and vehicle comprising same
WO 2023068893 A1	LG ENERGY SOLUTION LTD	Cylindrical secondary battery, and battery pack and vehicle including same
WO 2023068580 A1	LG ENERGY SOLUTION LTD	Battery module with pressure sensor for thermal runaway detection
WO 2023096381 A1	LG CHEMICAL LTD	Method for manufacturing positive electrode active material for lithium secondary battery, positive electrode active material for lithium secondary battery, positive electrode comprising same for lithium secondary battery, and lithium secondary battery
WO 2023097444 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric device, and method and device for preparing battery
WO 2023102903 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Composite current collector, sheet, secondary battery, battery module, battery pack, and electrical device
WO 2023055044 A1	LG ENERGY SOLUTION LTD	Electrode assembly for secondary battery, and secondary battery comprising same
WO 2023092389 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode slurry, positive electrode plate, and secondary battery comprising positive electrode plate
WO 2023097456 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electric device, and battery preparation method and device
WO 2023065178 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, battery, battery module, battery pack, and electronic apparatus
WO 2023070550 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Slow release device for battery, and secondary battery comprising slow release device
WO 2023075485 A1	LG ENERGY SOLUTION LTD	Method for manufacturing cathode for lithium secondary battery, cathode manufactured using same, and lithium secondary battery comprising same
WO 2023050406 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium ion battery, battery module comprising same, battery pack, and electrical apparatus
WO 2023058956 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack comprising same
WO 2023060534 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery
WO 2023095775 A1	NIPPON ELECTRIC GLASS CO	Sodium ion secondary battery
WO 2023113122 A1	LG ENERGY SOLUTION LTD	Battery module having function of detecting electrolyte leakage, and battery pack comprising same
WO 2023058998 A1	LG ENERGY SOLUTION LTD	Separator for electrochemical device, electrode assembly comprising same, and secondary battery

WO 2023065243 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Discharge control method and charging control method for battery pack control system
WO 2023082866 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery, method for preparing secondary battery, battery module, battery pack, and electrical apparatus
WO 2023075552 A1	LG ENERGY SOLUTION LTD	Positive electrode including sulfur-carbon composite, and lithium ion secondary battery comprising same
WO 2023077444 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery pack charging method, computer-readable storage medium, and electrical device
WO 2023087218 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Negative electrode sheet and preparation method thereof, secondary battery, battery module, battery pack, and power-consuming apparatus
WO 2023113961 A2	APPLIED MATERIALS INC	Cold spray deposition for electrode coatings
WO 2023063705 A1	LG ENERGY SOLUTION LTD	Coating die for lithium secondary battery, including removable spacer shims
WO 2023115274 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Thermal management system, thermal management method and electric device
WO 2023090926 A1	LG ENERGY SOLUTION LTD	Battery cell charging and discharging device comprising lower cooling fans
WO 2023097440 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery, electrical apparatus, and method and apparatus for preparing battery
WO 2023121116 A1	LG ENERGY SOLUTION LTD	Battery pack comprising heat transfer member having inlet and outlet for cooling fluid
WO 2023065128 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Negative electrode sheet, secondary battery, battery module, battery pack, and electric device
WO 2023108352 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode active material and related electrode sheet, secondary battery, battery module, battery pack, and device
WO 2023050310 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Sampling component, battery, electrical device, and sampling component fabrication and sampling method
WO 2023059156 A1	LG CHEMICAL LTD	Curable composition
WO 2023096182 A1	LG ENERGY SOLUTION LTD	Lithium-sulfur battery with improved energy density and output
WO 2023090642 A1	LG ENERGY SOLUTION LTD	Secondary battery including gas adsorption material, and secondary battery module
WO 2023054907 A1	LG ENERGY SOLUTION LTD	Method and system for protecting battery
WO 2023055094 A1	LG ENERGY SOLUTION LTD	Method for manufacturing electrode assembly and apparatus for manufacturing same
WO 2023063641 A1	ECOPRO BM CO LTD	Cathode active material and lithium secondary battery using same
WO 2023080581 A1	LG ENERGY SOLUTION LTD	Battery module and battery pack with reinforced safety
WO 2023068615 A1	LG ENERGY SOLUTION LTD	Gap adjustment device and secondary battery sealing equipment including same
WO 2023060593 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery box, battery, and electrical device
WO 2023075555 A1	LG ENERGY SOLUTION LTD	Cathode containing sulfur-carbon composites and lithium ion secondary battery comprising same
WO 2023070516 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery, battery module, battery pack, and electric device
WO 2023097437 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Current collector and preparation method thereof, secondary battery, battery module, battery pack, and electrical device
WO 2023051731 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, and electrical device
WO 2023115530 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Artificial graphite and preparation method thereof, secondary battery containing artificial graphite, and electric device
WO 2023060494 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, secondary battery, battery module, battery pack, and electric apparatus

WO 2023115431 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery
WO 2023122890 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery and electrical apparatus comprising same
WO 2023055091 A1	LG ENERGY SOLUTION LTD	Cylindrical battery cell, battery pack and vehicle including same, and method of producing cylindrical battery cell
WO 2023092413 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Charging method for power battery and battery management system
WO 2023074975 A1	MH TECH INC	Battery cooling apparatus
WO 2023087168 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrolyte, secondary battery, battery module, battery pack, and electric device
WO 2023109020 A1	NINGBO INST MATERIALS TECH & ENG CAS	Method for preparing phosphate positive electrode material
WO 2023068775 A1	LG ENERGY SOLUTION LTD	Manufacturing device for electrode assembly and manufacturing method using same
WO 2023050348 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electrical device, and manufacturing method and apparatus for battery cell
WO 2023092414 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Power battery charging method and battery management system
WO 2023097474 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Secondary battery, battery module, battery pack, and electric device
WO 2023056591 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Composite positive electrode current collector, pole piece, and secondary battery
WO 2023050388 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electric device, and method and device for manufacturing battery cell
WO 2023060493 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Electrode assembly, secondary battery, battery module, battery pack, and electric device
WO 2023111248 A2	NORTHVOLT REVOLT AB	Process for recovering battery active material concentrate
WO 2023070306 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery pack and electric apparatus
WO 2023090665 A1	LG ENERGY SOLUTION LTD	Novel additive for non-aqueous electrolyte solution and lithium secondary battery comprising same
WO 2023086096 A1	COULOMB SOLUTIONS INC	Systems and methods for adding a contactor at or near an msd
WO 2023060380 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method and apparatus for compensating sampling voltages of battery cells, and electric apparatus
WO 2023050162 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery cell, battery, electric device, and method and device for manufacturing battery cell
WO 2023070307 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery pack and electrical device
WO 2023114500 A2	NOHMS TECH INC	Lithium-ion battery anode material and methods of making the same
WO 2023063673 A1	LG ENERGY SOLUTION LTD	Negative electrode for secondary battery, and jelly-roll type electrode assembly including same
WO 2023050836 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Positive electrode plate, secondary battery, battery module, battery pack, and electronic apparatus
WO 2023070314 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery pack and electric device

WO 2023070368 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Lithium-nickel-manganese-based composite oxide material, secondary battery, and electrical device
WO 2023114491 A2	NOHMS TECH INC	Si-composite materials for use in lithium-ion battery anodes and methods of making the same

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SUPERCONDENSADORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2023053863 A1	OSAKA SODA CO LTD	Binder for electrode, electrode, and power storage device
WO 2023063002 A1	KURITA WATER IND LTD	Power storage device transport container and method for transporting power storage device using same
WO 2023107502 A1	SUSTAINABLE ENERGY TECH INC	Charge compatible supercapacitor system
WO 2023096793 A1	PACIFIC IND DEVELOPMENT CORPORATION	Metal ion cells with good low temperature performance
WO 2023094509 A1	FUND IMDEA ENERGIA	Supercapacitor for energy storage
WO 2023117491 A1	SKELETON TECH GMBH	Energy storage cells with fast charge and discharge capabilities
WO 2023106359 A1	TOAGOSEI CO LTD	Solid or gel-like electrolyte, curable composition, and power-storage device
WO 2023117490 A1	SKELETON TECH GMBH	Electrode material compositions for electrodes of energy storage cells with fast charge and discharge capabilities
WO 2023107503 A1	SUSTAINABLE ENERGY TECH INC	Evaluating and managing supercapacitors of electric vehicles
WO 2023074158 A1	KURITA WATER IND LTD	Transport container for power storage devices, and method for transporting power storage device using same
WO 2023107514 A1	SUSTAINABLE ENERGY TECH INC	System and method for analyzing temperature changes in supercapacitor battery storage for electric vehicle
WO 2023090445 A1	THE SCHOOL CORPORATION KANSAI UNIV	Nonaqueous electrolyte power storage element, device, and method for producing nonaqueous electrolyte power storage element
WO 2023112425 A1	TOYOTA JIDOSHOKKI KK	Device for manufacturing power storage module and method for manufacturing power storage module
WO 2023100453 A1	TOYOTA JIDOSHOKKI KK	Electrode unit manufacturing device, and electrode unit manufacturing method
WO 2023074559 A1	GS YUASA INT LTD	Power storage element
WO 2023100801 A1	GS YUASA INT LTD	Nonaqueous electrolyte power storage element, device, and method for using nonaqueous electrolyte power storage element
WO 2023085090 A1	RESONAC PACKAGING CORP	Exterior material for power storage device, and power storage device
WO 2023100548 A1	DAINIPPON INK & CHEMICALS	Negative electrode active material, secondary battery, and method for manufacturing negative electrode active material
WO 2023114429 A1	SUSTAINABLE ENERGY TECH INC	Intelligent hybrid power system for electrical vehicles
WO 2023091251 A2	TEXAS A & M UNIV SYS	Structural zinc-ion supercapacitors (zihscs)
WO 2023114278 A1	FASTCAP SYSTEMS CORP	Electrodes for energy storage devices
WO 2023076632 A1	CRONIN JOHN	A modular power pack energy storage unit

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SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2023061948 A1	BAYERISCHE MOTOREN WERKE AG	Method for operating a brake control system, brake control system, computer program, and computer-readable storage medium
WO 2023119150 A1	BREMBO SPA	System for managing the electric power flow in battery packs of an electric or hybrid vehicle
WO 2023099373 A1	ZF CV SYSTEMS GLOBAL GMBH	Method for actuating a friction brake device, control unit, and electrically drivable vehicle, more particularly utility vehicle
WO 2023111318 A1	EMINING AG	Method for controlling a brake system, control unit for controlling a brake system, and vehicle having such a control unit
WO 2023074319 A1	HITACHI LTD	Brake device health determination device and brake device health determination method
WO 2023089256 A1	PSA AUTOMOBILES SA	Method for the thermal monitoring of battery modules
WO 2023107576 A1	GIUBBOLINI LUIGI	Integrated powertrain system with motortransformer acting as a motor or an isolation transformer

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MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2023051988 A1	BOSCH GMBH ROBERT	Vehicle sub-assembly
WO 2023053588 A1	NIDEC CORP	Electric power unit
WO 2023117347 A1	BAYERISCHE MOTOREN WERKE AG	Layout for electrical drive unit
WO 2023121991 A1	MAGNA POWERTRAIN AMERICA INC	COAXIAL emotor LUBRICATION SYSTEM AND METHOD
WO 2023076799 A1	ATIEVA INC	Dual sided stator cooling system
WO 2023072442 A1	AUDI AG	Coolant supply for an electric vehicle axle drive
WO 2023117585 A1	ROLLS ROYCE DEUTSCHLAND LTD & CO KG	Electric machine having a corrugated coupling element
WO 2023057406 A1	BROSE FAHRZEUGTEILE SE & CO KG WUERZBURG	Electric motor of an ancillary unit of a motor vehicle
WO 2023116976 A1	KIEKERT AG	Actuator for motor vehicle applications
WO 2023084411 A1	ELDOR CORP SPA	Electric motor
WO 2023066648 A1	BAYERISCHE MOTOREN WERKE AG	Stator for an electric machine of a motor vehicle, and electric machine
WO 2023083516 A1	BAYERISCHE MOTOREN WERKE AG	Method for controlling an electric motor of a battery-operated electric vehicle, battery-operated electric vehicle and a control device for a battery-operated electric vehicle
WO 2023054609 A1	PANASONIC IP MAN CO LTD	Rotary machine, method for producing rotary machine, and magnetic sensor
WO 2023078922 A1	RENAULT SAS	Low-pressure cooling circuit
WO 2023103983 A1	BEIJING CO WHEELS TECH CO LTD	Vehicle power control system, method and apparatus, storage medium, and vehicle
WO 2023121294 A1	POSCO CO LTD	Non-oriented electrical steel sheet and motor core comprising same
WO 2023110011 A1	SCHAEFFLER TECHNOLOGIES AG	Arrangement for supplying current or voltage to an electric drive
WO 2023078740 A1	VALEO EAUTOMOTIVE GERMANY GMBH	Electric drive comprising an electric machine with a star connection
WO 2023120004 A1	HITACHI ASTEMO LTD	Electronic control device and electric braking device
WO 2023121308 A1	POSCO CO LTD	Non-oriented electrical steel sheet, manufacturing method therefor, and motor core comprising same
WO 2023110383 A1	RENAULT SAS	Casing for an electric machine and associated electric machine, cooling circuit, vehicle and cooling method
WO 2023111588 A1	SAIETTA GROUP PLC	Stacked-winding stator electrical machine
WO 2023076941 A1	ATIEVA INC	Overmolded busbars and integrated sensors
WO 2023084295 A1	BABAJANI AMIR HOSSEIN	Stepper axial flux electric motor with dc two polar pair rotor and stator
WO 2023076920 A1	ATIEVA INC	Direct-axis voltage based angular offset calibration in an electric motor
WO 2023071380 A1	SCHAEFFLER TECHNOLOGIES AG	Motor and vehicle power system
WO 2023104434 A1	BOSCH GMBH ROBERT	Method for producing a laminated core of an electric machine
WO 2023119193 A1	TECNOMATIC SPA	System for assembling a stator or rotor winding, related assembling method and assembling tool
WO 2023126357 A1	NORTHVOLT AB	Automotive platform
WO 2023062901 A1	MITSUBISHI ELECTRIC CORP	Method and system for controlling motion of an electric vehicle (ev)
WO 2023061525 A1	SCHAEFFLER TECHNOLOGIES AG	Rotor, method for manufacturing a rotor, and electric machine
WO 2023077024 A1	ATIEVA INC	Motor-acceleration based spin up control
WO 2023075073 A1	GOO JEI HYUN	Apparatus for operating alternatively as dc (direct current) motor and dc generator
WO 2023113025 A1	ISUZU MOTORS LTD	In-wheel motor
WO 2023073673 A1	BOMBARDIER RECREATIONAL PRODUCTS INC	Electric vehicle with a cooling arrangement
WO 2023079836 A1	JFE STEEL CORP	Non-oriented electromagnetic steel plate and manufacturing method thereof
WO 2023102241 A1	OMNI POWERTRAIN TECH LLC	Two speed gearbox

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CONVERTIDORES, INVERSORES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2023161025 A1	KIEPE ELECTRIC GMBH	Method for operating a hybrid battery trolley vehicle, and hybrid battery trolley vehicle
WO 2023083915 A1	VALEO EAUTOMOTIVE GERMANY GMBH	Method for controlling a power converter using a variable switching frequency
WO 2023088992 A1	WISE INTEGRATION	Method for controlling a voltage converter
WO 2023099151 A1	BAYERISCHE MOTOREN WERKE AG	Method for controlling an on-board power supply system for a motor vehicle, on-board power supply system and motor vehicle
WO 2023121984 A1	OUR NEXT ENERGY INC	Power supply system for powering a home
WO 2023053911 A1	KYOCERA CORP	Film capacitor, connected capacitor, inverter and electric vehicle
WO 2023094701 A1	VALEO SIEMENS EAUTOMOTIVE FRANCE SAS	Power converter with a decoupling module
WO 2023057163 A1	VITESCO TECH GMBH	Electrical system for a motor vehicle
WO 2023066458 A1	HUAWEI TECH CO LTD	Dc-dc converter arrangement
WO 2023104574 A1	VITESCO TECH GMBH	Battery connection circuit having a converter and configurably connectable load terminals on either side of the dc-dc converter, and vehicle on-board electrical system comprising said circuit
WO 2023094663 A1	BOSCH GMBH ROBERT	Electronics module
WO 2023057329 A1	VITESCO TECH GMBH	Electrical system for a motor vehicle
WO 2023089248 A1	NIDEC PSA EMOTORS	Method for overvoltage protection in a system comprising a battery, an inverter and an electrical machine
WO 2023094053 A1	BOSCH GMBH ROBERT	Method for actuating a first and a second switch element of a half-bridge in a current converter, and current converter having a half-bridge
WO 2023084435 A1	ELDOR CORP SPA	Electric or hybrid electric-endothermic traction system and method for reconfiguring an electric machine
WO 2023084432 A1	ELDOR CORP SPA	An electric or hybrid electric-endothermic traction system and method for reconfiguring an electric machine
WO 2023086282 A1	WOLFSPEED INC	Compact power module
WO 2023056071 A1	OUR NEXT ENERGY INC	Long cycle life lithium metal and anode-free cells
WO 2023053873 A1	MITSUBISHI HEAVY IND LTD	Power module
WO 2023094529 A1	HITACHI ENERGY SWITZERLAND AG	Power control of a power converter based on a variable modulation frequency
WO 2023122105 A1	BREK ELECTRONICS CORP	Transformerless bidirectional dc charger for electric vehicles
WO 2023119746 A1	KUBOTA KK	Electric work vehicle
WO 2023099272 A1	RENAULT SAS	Active compensation device, converter, motor vehicle and method associated therewith
WO 2023122118 A1	OUR NEXT ENERGY INC	Single core cross-coupled multi-phase inductor
WO 2023074281 A1	DENSO CORP	Switch driving device and program
WO 2023055895 A1	ENURE INC	Polyphase ac to dc converter
WO 2023119792 A1	FURUKAWA ELECTRIC CO LTD	Power converter, power system, and method for controlling power converter
WO 2023053490 A1	HITACHI ASTEMO LTD	Inverter control device, hybrid system, mechanically and electrically integrated unit, electric vehicle system, and inverter control method
WO 2023088568 A1	HUAWEI TECH CO LTD	Controller for controlling a balancer circuit
WO 2023089249 A1	NIDEC PSA EMOTORS	Inverter comprising a device for the mutual alignment of three components
WO 2023111115 A1	DELPHI TECH IP LTD	Systems and methods for controlling inverter active discharge using power device switching losses
WO 2023111116 A1	DELPHI TECH IP LTD	Configurable fault and control safety architecture for inverter system
WO 2023120212 A1	KUBOTA KK	Electric work vehicle
WO 2023058381 A1	DENSO CORP	Power conversion device
WO 2023090873 A1	LG INNOTEK CO LTD	Converter
WO 2023120030 A1	DENSO CORP	Control device for power converter and program
WO 2023099882 A1	PETALITE LTD	A flyback converter
WO 2023107255 A1	CANOO TECH INC	Low-inductance dual-full bridge power supply module with integrated sensing

WO 2023070215 A1	GOVERNING COUNCIL UNIV TORONTO	Integrated wireless charging boost rectifier for electric vehicles
WO 2023110973 A1	VALEO SYSTEMES DE CONTROLE MOTEUR	Voltage converter comprising a device for measuring the current flowing in the busbars
WO 2023089746 A1	HITACHI ASTEMO LTD	Motor control device
WO 2023111185 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Dc/dc step-down converter with symmetrized output voltage
WO 2023110061 A1	HUAWEI TECH CO LTD	Balancer circuit for series connection of two dc-link capacitors, method for controlling the balancer circuit and converter arrangement
	ROSADO SEBASTIAN	
WO 2023068048 A1	AISAN IND	Power control unit for electric vehicle
WO 2023068750 A1	SAMSUNG ELECTRONICS CO LTD	Wireless power transmitting apparatus and control method thereof
WO 2023079894 A1	YAZAKI CORP	In-vehicle charger
WO 2023112220 A1	HITACHI ASTEMO LTD	Power conversion device
WO 2023110895 A1	BOSCH GMBH ROBERT	Power module having high-voltage insulation
WO 2023095534 A1	AUTONETWORKS TECHNOLOGIES LTD	Reactor, converter, and power conversion device
WO 2023110966 A1	VALEO SYSTEMES DE CONTROLE MOTEUR	Switching arm using a printed circuit board
WO 2023079972 A1	OMRON TATEISI ELECTRONICS CO	Isolated dc-dc conversion device, control method therefor, and power conversion system
WO 2023080058 A1	DENSO CORP	Electric vehicle control device
WO 2023079960 A1	DENSO CORP	Motor drive device
WO 2023067376 A1	UNIV KHALIFA SCIENCE & TECHNOLOGY	Bidirectional dc-dc converter
WO 2023072598 A1	BOSCH GMBH ROBERT	Method for operating two electrical machines in a powertrain of a vehicle
WO 2023110725 A1	VITESCO TECH GMBH	Method and apparatus to operate a battery unit
WO 2023073665 A1	BOMBARDIER RECREATIONAL PRODUCTS INC	Electric vehicle with an electric powerpack arrangement
WO 2023122197 A1	LORDSTOWN EV CORP	Busbar connector assembly for electric vehicle
WO 2023111326 A1	JAGUAR LAND ROVER LTD	Transformer circuit for an onboard charger of an electric vehicle
WO 2023068579 A1	LG ENERGY SOLUTION LTD	Relay assembly and electric vehicle comprising same

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RECARGA DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2023177247 A1	KIM DONG HWI	Fire detection and extinguishing device and method for electric mobility battery pack
WO 2023062085 A1	BRUSA ELEKTRONIK AG	Ground-pad module with sensor arrangement
WO 2023066467 A1	HUAWEI TECH CO LTD	Vehicle control unit for power management of a vehicle
WO 2023076781 A1	CATERPILLAR INC	Determining component and service recommendations during an electric charge
WO 2023099467 A1	CASTELLAN HANS GEORG STEFAN	Charging device
WO 2023067254 A1	PSA AUTOMOBILES SA	Method for controlling a battery management system
WO 2023091703 A1	LOCUS ROBOTICS CORP	A robot charging dock with illuminated charge connector
WO 2023104423 A1	BAYERISCHE MOTOREN WERKE AG	Charging train device for a motor vehicle
WO 2023094266 A1	BRUSA ELEKTRONIK AG	Ac charging system for charging a high-voltage battery of a vehicle
WO 2023073525 A1	RMG IND ADVANCE S R L	Vehicle and charging station for the distributed electric charge of electric car batteries and related safety system
WO 2023066593 A1	BAYERISCHE MOTOREN WERKE AG	Protective device for a high-voltage battery in electrified motor vehicles
WO 2023069908 A1	HEVO INC	Systems and methods for dynamic roadway charging
WO 2023075624 A1	OPEN DYNAMICS LDA	Process, system and kit for automatically controlling the electrical current or power available to a target device connected to an electrical installation
WO 2023078624 A1	BAYERISCHE MOTOREN WERKE AG	Method for charging a traction battery of an electrically drivable vehicle, vehicle, and charger
WO 2023089873 A1	MINISUBISHI MOTORS CORP	Operation control device for cooling device
WO 2023110719 A1	JAGUAR LAND ROVER LTD	Battery charging protocols
WO 2023094264 A1	VALEO SYSTEMES THERMIQUES	Method for optimised cooling of an electric or hybrid vehicle battery
WO 2023079284 A1	GRID SMARTER CITIES	A method for booking an electrical vehicle charging station and a method of managing electrical vehicle battery charging at a commercial parking location
WO 2023072648 A1	BOSCH GMBH ROBERT	Device and method for controlling a charging process and system for automatically charging a traction battery
WO 2023073982 A1	EVIP INC	Battery module and motor drive circuit
WO 2023102267 A1	SUSTAINABLE ENERGY TECH INC	Integrated power system and method for energy management for electric vehicle
WO 2023050172 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method and apparatus for preventing battery overcharge, and charger and storage medium
WO 2023102127 A1	TESLA INC	Vehicle charging management based on variable charging windows
WO 2023123770 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Battery charging method and vehicle electric system
WO 2023076780 A1	CATERPILLAR INC	Biometric identification for batteries for electric work vehicles
WO 2023084959 A1	MINISUBISHI MOTORS CORP	Electric vehicle
WO 2023104497 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Method for modifying a charge of a drive battery of an electric vehicle, controller for an electric vehicle, computer program and computer-readable medium
WO 2023085334 A1	CHUGOKU ELECTRIC POWER	Mobile body charging system and mobile body charging method
WO 2023078776 A1	RUOFF WORK & LIFE GMBH & CO KG	Charging method, fire-protection device and charging station for an electric vehicle
WO 2023101186 A1	THIS CAT LC	Carrier-type battery pack and operating method for carrier-type battery pack
WO 2023120886 A1	LG ENERGY SOLUTION LTD	Battery charger
WO 2023096227 A1	TBU INC	Method for providing recommended charging path, charging station information provision server for performing same, and charging station information provision application for providing recommended charging path
WO 2023086261 A1	BAE SYS CONTROLS INC	Method for charging a battery using a thermal model for an electrical device connected to the battery
WO 2023059481 A1	CATERPILLAR INC	System and method for charging an electric vehicle
WO 2023111339 A1	NYOBOLT LTD	Charging device for batteries
WO 2023092416 A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	Method for charging traction battery, and battery management system

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CAMBIO DE BATERÍAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2023098712 A	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Chassis battery swapping method suitable for electric vehicle
WO 2023063200 A	HONDA MOTOR CO LTD	Parking/stopping zone, replacement device, and autonomous traveling vehicle
WO 2023061422 A1	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Parking state monitoring method and monitoring system, and electric vehicle and battery swapping station
WO 2023051781 A1	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Assembly method for reinforced concrete structure battery swapping station
WO 2023051795 A1	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Positioning component, battery swapping device, and unlocking method when using battery swapping device
WO 2023061418 A1	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Battery swapping control method and system, battery-swapping platform, vehicle to be subjected to battery swapping, and storage medium
WO 2023101874 A1	CATERPILLAR INC	Charging management for electric work vehicles
WO 2023116486 A1	GER CHIH CHAN	Battery pack replacement system for vehicles
WO 2023050959 A1	BYD CO LTD	Vehicle battery replacement control method, system and vehicle
WO 2023098877 A1	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Battery dismounting control method and apparatus, and battery mounting control method and apparatus
WO 2023098866 A1	AULTON NEW ENERGY AUTOMOBILE TECH CO LTD	Battery dismounting control method and apparatus, and battery mounting control method and apparatus

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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



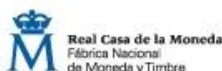
Los ITPs** de la OEPM detectaron solicitudes de patente relevantes cuando estábamos a mitad del proyecto y gracias a ello pudimos reconducir nuestra investigación.



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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