

Noticias

El Ministerio de Industria, Comercio y Turismo (MINCOTUR) dio a conocer el día 1 de agosto la [Propuesta de Resolución Provisional del PERTE del Vehículo Eléctrico y Conectado. Convocatoria 2022](#). Dicha Propuesta se notifica a los Interlocutores con la Administración a través del registro electrónico. Las entidades que forman parte de cada agrupación deberán ponerse en contacto con los Interlocutores de la misma para acceder al detalle de proyectos primarios estimados y desestimados en cada proyecto tractor.

Con esta notificación se inicia el trámite de audiencia para que los interesados, a través de los interlocutores con la Administración, puedan formular las alegaciones que estimen convenientes, en un principio sería de 10 días hábiles a contar desde el día siguiente a la fecha de notificación, pero al concederse una ampliación de plazo para la presentación de alegaciones a la Propuesta de Resolución Provisional, de cinco (5) días hábiles, cuentan con un total de 15 días hábiles para presentar las alegaciones a través del registro electrónico.

El 27 de septiembre se hizo público que El Ministerio para la Transición Ecológica y el Reto Demográfico (MITECO) ponía en marcha la

segunda convocatoria del Programa [MOVES Singulares II](#), dotado con 264 millones de euros de los fondos del Plan de Recuperación, Transformación y Resiliencia (PRTR) para fomentar la madurez tecnológica del vehículo eléctrico y de pila de combustible y facilitar su comercialización. La nueva convocatoria de la segunda edición del MOVES Singulares, gestionada por el Instituto para la Diversificación y Ahorro de la Energía (IDAE), incentivará proyectos innovadores de empresas españolas que, con una inversión mínima de 100.000 euros, promuevan el salto tecnológico hacia el vehículo eléctrico y de pila de combustible.

Las solicitudes para optar a este programa se podrán remitir desde el 3 de octubre hasta el próximo 3 de noviembre y deberán tramitarse a través de la sede electrónica del IDAE. Se considerarán proyectos singulares los que contemplen las actuaciones descritas en la Orden TED/800/202.

[BOLETINES OEPM](#)

CONTENIDO:

- **TECNOLOGÍAS VEHICULARES**
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 - [Sistemas de recuperación de energía, p.ej. frenos regenerativos](#)
 - [Máquinas eléctricas](#)
 - [Convertidores, inversores](#)

- **INFRAESTRUCTURAS DE CARGA**
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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 2022184257 A1 | KAUTEX TEXTRON GMBH & CO KG | Battery housing system for a traction battery of an electric vehicle, traction battery for an electric vehicle and electric vehicle |
| WO 2022186751 A1 | SCANIA CV AB | Battery cell module comprising battery cells electrically coupled in parallel for balancing |
| WO 2022186749 A1 | SCANIA CV AB | An electric battery cell unit and an electric battery arrangement |
| WO 2022189145 A1 | BAYERISCHE MOTOREN WERKE AG | Calendering apparatus for the production of an electrode |
| WO 2022192213 A1 | ROGERS CORP | Composite thermal management sheet, method of manufacture, and articles using the same |
| WO 2022189671 A1 | WEBASTO SE | Battery-monitoring unit |
| WO 2022197595 A1 | CELGARD LLC | Separator for electric storage device and electric storage device |
| WO 2022183285 A1 | LI CYCLE CORP | A method for target metal removal via sulphide precipitation |
| WO 2022185580 A1 | VEHICLE ENERGY JAPAN INC | Lithium ion secondary battery and method for producing same |
| WO 2022189012 A1 | SMARTIQ INNOVATION TECH GMBH | Measuring cell for battery modules, battery module, and battery |
| WO 2022189468 A1 | RENAULT SAS | Method for detecting a motor vehicle overweight state, and method for managing the charge of a traction battery |
| WO 2022180551 A1 | CASTROL LTD | Dielectric thermal management fluids and methods for using them |
| WO 2022185561 A1 | NIDEC CORP | Temperature regulation device |
| WO 2022189105 A1 | VOLKSWAGEN AG | Method for predicting the operational reliability of a traction battery |
| WO 2022184054 A1 | HUAWEI TECH CO LTD | Negative electrode material, composite negative electrode material and preparation method therefor, secondary battery, and terminal device |
| WO 2022182313 A2 | T C ERCIYES UNIV | Development of new air-stable o3-naxmo2 type layered metal oxides for sodium ion batteries |
| WO 2022189295 A1 | E TECH GMBH | Directly cooled battery module and battery with a directly cooled battery module |
| WO 2022195518 A1 | ELECTROVAYA INC | Rechargeable solid-state lithium ion battery |
| WO 2022186173 A1 | GS YUASA INT LTD | Power storage element and method for manufacturing same |
| WO 2022192998 A1 | NANODE BATTERY TECH LTD | Tin alloy sheets as negative electrodes for non-aqueous li and na-ion batteries |
| WO 2022186083 A1 | MURATA MANUFACTURING CO | Non-aqueous electrolyte secondary battery |
| WO 2022185584 A1 | VEHICLE ENERGY JAPAN INC | Lithium ion secondary battery and manufacturing method for negative electrode for lithium ion secondary battery |
| WO 2022196938 A1 | SAMSUNG SDI CO LTD | Secondary battery |
| WO 2022194651 A1 | IEE SA | Battery pack and battery management system |
| WO 2022175501 A1 | GRAY IAN | Electric vehicle booster |
| WO 2022175149 A1 | VALEO SYSTEMES THERMIQUES | Method for managing the heat of an electric battery of a vehicle |
| WO 2022183401 A1 | HUAWEI DIGITAL POWER TECH CO LTD | Asynchronous motor processing method, apparatus, device and system, and vehicle |
| WO 2022144511 A1 | ARKEMA FRANCE | Ionic liquid based on bis(fluorosulfonyl)imide |
| WO 2022177023 A1 | ADEKA CORP | Conductive undercoating agent |
| WO 2022182209 A1 | LG ENERGY SOLUTION LTD | Positive electrode, and lithium secondary battery comprising same |
| WO 2022179064 A1 | NANJING BOCHI NEW ENERGY CO LTD | Solid electrolyte and application thereof |
| WO 2022182085 A1 | LG ENERGY SOLUTION LTD | Unit cell transfer device |
| WO 2022182162 A1 | LG ENERGY SOLUTION LTD | Cathode active material, cathode comprising same, and secondary battery |
| WO 2022186665 A1 | LG CHEMICAL LTD | Cathode active material, preparation method therefor, and cathode and lithium secondary battery each comprising same |

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| WO 2022152516 A1 | VITESCO TECHNOLOGIES GERMANY GMBH | Device for preventing a deep discharge of energy storage cells |
| WO 2022188484 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery cell and manufacturing method and manufacturing system therefor, battery, and powered device |
| WO 2022156968 A1 | BAYERISCHE MOTOREN WERKE AG | Temperature-control system and method for the temperature control of an electrified motor vehicle |
| WO 2022179559 A1 | HUAWEI TECH CO LTD | Solid electrolyte and preparation method therefor, and secondary battery |
| WO 2022182047 A1 | LG ENERGY SOLUTION LTD | Electrode assembly having high energy density and lithium secondary battery comprising same |
| WO 2022146756 A1 | PACIFIC IND DEVELOPMENT CORPORATION | Zeolite-based composite separator for a lithium-ion secondary battery and manufacturing method thereof |
| WO 2022146768 A1 | GENTHERM INC | Battery cooling system |
| WO 2022168233 A1 | TOSHIBA KK | Non-aqueous electrolyte battery and battery pack |
| WO 2022176957 A1 | MURATA MANUFACTURING CO | Method for manufacturing secondary battery |
| WO 2022177787 A1 | LYTEN INC | Polymeric-inorganic hybrid layer for a lithium anode |
| WO 2022144730 A1 | 3M INNOVATIVE PROPERTIES CO | Battery assembly and methods |
| WO 2022162237 A1 | ASTON MARTIN LAGONDA LTD | Battery assembly for a vehicle |
| WO 2022152743 A2 | VITESCO TECHNOLOGIES GERMANY GMBH | Electric battery and method for producing such an electric battery |
| WO 2022162005 A1 | INNOLITH TECH AG | So2-based electrolyte for a rechargeable battery cell, and rechargeable battery cell |
| WO 2022181902 A1 | LS CABLE & SYSTEM LTD | Hetero-bonded electric vehicle battery module frame |
| WO 2022162008 A1 | INNOLITH TECH AG | Rechargeable battery cell |
| WO 2022175350 A1 | VALEO SYSTEMES THERMIQUES | Method for managing the heat of an electric battery |
| WO 2022181794 A1 | ENERGYWITH CO LTD | Electrode plate group for batteries, storage battery, battery pack, electric vehicle, separator for batteries, method for producing separator for batteries, and method for producing electrode plate group for batteries |
| WO 2022191674 A1 | LG ENERGY SOLUTION LTD | Electrode assembly having excellent electrolyte impregnability, and battery, battery pack, and vehicle including same |
| WO 2022144657 A1 | PSA AUTOMOBILES SA | Battery pack and vehicle |
| WO 2022168114 A1 | TVS MOTOR CO LTD | Range determination of electric vehicles |
| WO 2022175604 A1 | PSA AUTOMOBILES SA | Battery module comprising cooled cylindrical cells |
| WO 2022182117 A1 | LG ENERGY SOLUTION LTD | Lithium secondary battery |
| WO 2022159749 A1 | CPS TECH HOLDINGS LLC | Battery housing and battery module including the battery housing |
| WO 2022162085 A1 | SOLVAY | Composition comprising a sulfide electrolyte |
| WO 2022141035 A1 | DOW SILICONES CORP | Thermal insulation for battery modules |
| WO 2022176790 A1 | NATIONAL UNIV CORPORATION NAGAOKA UNIV OF TECHNOLOGY | Negative electrode active substance for sodium ion secondary battery |
| WO 2022162096 A1 | XEROTECH LTD | Modular battery pack |
| WO 2022182132 A1 | DAEGU GYEONGBUK INST SCIENCE & TECH | Electrolyte for convection-induction type secondary battery and secondary battery comprising same |
| WO 2022188163 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrolyte, secondary battery, battery module, battery pack, and device |
| WO 2022144725 A1 | I TEN | Method for producing a porous anode for a lithium-ion secondary battery, resulting anode, and microbattery comprising said anode |
| WO 2022177110 A1 | ZAYIN CHEMICAL CO LTD | Novel anion receptor and electrolyte comprising same |
| WO 2022158749 A1 | SAMSUNG SDI CO LTD | Additive for electrolyte of lithium battery, organic electrolyte comprising same and lithium battery comprising electrolyte |
| WO 2022158917 A1 | SOULBRAIN CO LTD | Electrolyte solution and secondary battery comprising same |
| WO 2022160296 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery cell, battery, electric device, and manufacturing method and device for battery cell |
| WO 2022163790 A1 | GS YUASA INT LTD | Electricity storage element |

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| WO 2022165727 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrode assembly, battery cell, battery, and manufacturing device and method for electrode assembly |
| WO 2022170299 A2 | GLOBAL GRAPHENE GROUP INC | Flame-resistant quasi-solid and solid-state electrolytes, lithium batteries and manufacturing method |
| WO 2022169271 A1 | LG CHEMICAL LTD | Positive electrode active material and method for preparing same |
| WO 2022149311 A1 | PANASONIC IP CORP AMERICA | Battery authenticity determination method, battery authenticity determination apparatus, and program |
| WO 2022158919 A1 | SOULBRAIN CO LTD | Electrolyte and secondary battery comprising same |
| WO 2022170317 A1 | GLOBAL GRAPHENE GROUP INC | Phosphazene compound-based electrolyte compositions, quasi-solid and solid-state electrolytes, and lithium batteries |
| WO 2022177973 A1 | EMATRIX ENERGY SYSTEMS INC | Expandable battery module |
| WO 2022141200 A1 | UNIV SHENZHEN | Aqueous binder for lithium ion battery, preparation method therefor, and lithium ion battery pole piece |
| WO 2022162949 A1 | SHOWA DENKO MAT CO LTD | Method for manufacturing negative electrode material for lithium-ion secondary cell, and method for manufacturing lithium-ion secondary cell |
| WO 2022171802 A1 | BAYERISCHE MOTOREN WERKE AG | Method for producing a cathode for a lithium-ion battery, and lithium-ion battery |
| WO 2022145216 A1 | AUTONETWORKS TECHNOLOGIES LTD | Battery sensing unit and bus bar module for battery |
| WO 2022160162 A1 | NINGDE AMPEREX TECHNOLOGY LTD | Laminated porous membrane, secondary battery, and electronic device |
| WO 2022163049 A1 | MURATA MANUFACTURING CO | Secondary battery, electronic device, and electric tool |
| WO 2022163479 A1 | MURATA MANUFACTURING CO | Secondary battery, electronic device, and electric tool |
| WO 2022169347 A1 | IAC IN NAT UNIV CHUNGNAM | Flame retardant or nonflammable electrolytic solution, and lithium secondary battery comprising same |
| WO 2022168677 A1 | ENERGYWITH CO LTD | Control method for zinc battery and power supply system |
| WO 2022172046 A1 | NISSAN MOTOR | Charge/discharge control system and charge/discharge control method |
| WO 2022181108 A1 | DENSO CORP | Degradation suppression system |
| WO 2022158295 A1 | AUTONETWORKS TECHNOLOGIES LTD | Wiring module |
| WO 2022158744 A1 | SAMSUNG SDI CO LTD | Electrolyte for lithium secondary battery and lithium secondary battery comprising same |
| WO 2022158920 A1 | SOULBRAIN CO LTD | Electrolyte and secondary battery comprising same |
| WO 2022170486 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery, electrical device, and preparation method for battery |
| WO 2022171936 A1 | PSA AUTOMOBILES SA | Method for authorising or rejecting measurement of a battery insulation fault |
| WO 2022163478 A1 | SANYO ELECTRIC CO | Power source device and method for manufacturing same |
| WO 2022163620 A1 | AIST | Electrolytic solution for non-aqueous secondary battery, and non-aqueous secondary battery |
| WO 2022182072 A1 | LG CHEMICAL LTD | Anode for secondary battery, preparation method therefor, and lithium secondary battery comprising same |
| WO 2022142651 A1 | JIANGSU CONTEMPORARY AMPEREX TECH LTD | Solid electrolyte membrane, solid battery, battery module, battery pack, and electric device |
| WO 2022159987 A1 | GLOBAL GRAPHENE GROUP INC | Flame-resistant electrolyte compositions, quasi-solid and solid-state electrolytes, and lithium batteries |
| WO 2022163520 A1 | GS YUASA INT LTD | Power storage element |
| WO 2022163636 A1 | GS YUASA INT LTD | Power storage element |
| WO 2022158734 A1 | LG ENERGY SOLUTION LTD | Battery module, battery pack including same, and method of manufacturing battery module |
| WO 2022169350 A1 | LG CHEMICAL LTD | Electrode for electrochemical device, method for manufacturing same, and electrochemical device comprising same |
| WO 2022169270 A1 | LG CHEMICAL LTD | Positive electrode active material and preparation method therefor |
| WO 2022170494 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrode assembly and related battery, apparatus, manufacturing method, and manufacturing apparatus |
| WO 2022176317 A1 | DENSO CORP | Secondary battery control device |
| WO 2022158916 A1 | SOULBRAIN CO LTD | Electrolytic solution, and secondary battery comprising same |
| WO 2022158918 A1 | SOULBRAIN CO LTD | Electrolyte and secondary battery comprising same |

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| WO 2022163538 A1 | PANASONIC IP MAN CO LTD | Lithium secondary battery |
| WO 2022170363 A1 | GLOBAL GRAPHENE GROUP INC | Flame-retardant high-elasticity polymer for lithium metal protection, lithium secondary battery and manufacturing method |
| WO 2022163138 A1 | MURATA MANUFACTURING CO | Electrolyte for secondary battery, and secondary battery |
| WO 2022170496 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrode assembly, battery cell, battery, apparatus, manufacturing method, and manufacturing apparatus |
| WO 2022172850 A1 | NIPPON KODOSHI CORP | Support body and lithium ion secondary battery |
| WO 2022145979 A1 | BATRONICS CO LTD | Portable impedance spectroscope and method for measuring impedance spectrum of high-voltage battery pack |
| WO 2022156461 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Charging heating device, and control method and device of charging heating device |
| WO 2022166937 A1 | MICROVAST POWER SYSTEMS CO LTD | Solid state electrolyte and lithium-ion battery including solid state electrolyte |
| WO 2022179653 A2 | FRANKE TORSTEN | Traction battery with a battery housing part for accident-induced force absorption, and motor vehicle |
| WO 2022174267 A1 | GLOBAL GRAPHENE GROUP INC | Solid-state medium for lithium ion transport, lithium batteries and manufacturing method |
| WO 2022148915 A1 | PSA AUTOMOBILES SA TO USE | Monitoring the status of a low-voltage rechargeable battery of a vehicle having an electric power train |
| WO 2022154107 A1 | IBIDEN CO LTD | Heat transfer suppression sheet for battery pack, and battery pack |
| WO 2022154603 A1 | LG ENERGY SOLUTION LTD | Positive electrode active material for lithium secondary battery, method for manufacturing same, and positive electrode and lithium secondary battery comprising same |
| WO 2022158725 A1 | LG ENERGY SOLUTION LTD | Assembly line system for stack-type battery module |
| WO 2022181112 A1 | DENSO CORP | Battery diagnostic system |
| WO 2022145693 A1 | ECOPRO BM CO LTD | Positive electrode active material, and lithium secondary battery comprising same |
| WO 2022146055 A1 | HANON SYSTEMS | Cooler for a plurality of cylindrical batteries |
| WO 2022141010 A1 | ENVISION DYNAMICS TECH JIANGSU CO LTD | Sulfate compound, nonaqueous electrolyte containing same, and power storage device |
| WO 2022158367 A1 | MITSUI CHEMICALS INC | Battery pack case and battery pack |
| WO 2022170491 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery, and associated power device, preparation method and preparation device |
| WO 2022172619 A1 | PANASONIC IP MAN CO LTD | Battery and method for manufacturing battery |
| WO 2022158670 A1 | LG CHEMICAL LTD | Lithium transition metal oxide, cathode additive for lithium secondary battery, and lithium secondary battery comprising same |
| WO 2022163475 A1 | SANYO ELECTRIC CO | Power supply device |
| WO 2022149899 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack comprising same |
| WO 2022158607 A1 | APB CORP | Discharge control method for lithium-ion secondary battery and lithium-ion secondary battery system |
| WO 2022166490 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery, electric apparatus, fabrication method for battery, and device thereof |
| WO 2022163206 A1 | SEKISUI POLYMATECH CO LTD | Battery module |
| WO 2022149792 A1 | SAMSUNG SDI CO LTD | Electrolyte for lithium secondary battery, and lithium secondary battery comprising same |
| WO 2022153730 A1 | ENVISION AESC JAPAN LTD | Battery module and method for producing same |
| WO 2022149886 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack including same |
| WO 2022154106 A1 | IBIDEN CO LTD | Heat transfer suppression sheet for battery pack, and battery pack |
| WO 2022160180 A1 | HUAWEI DIGITAL POWER TECH CO LTD | Battery module and vehicle |
| WO 2022163733 A1 | TOYOTA MOTOR CO LTD | Nonaqueous electrolyte solution for lithium ion secondary batteries, and lithium ion secondary battery |
| WO 2022165688 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrode assembly and manufacturing method and system therefor, battery cell, and battery |

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| WO 2022146521 A1 | PALATOV GROUP LLC | Battery module with series connected cells, internal relays and internal battery management system |
| WO 2022149900 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack comprising same |
| WO 2022172612 A1 | PANASONIC IP MAN CO LTD | Battery, battery system, and battery manufacturing method |
| WO 2022150849 A1 | GLOBAL GRAPHENE GROUP INC | Flame-resistant quasi-solid and solid-state electrolyte for lithium-ion and lithium metal batteries and production method |
| WO 2022163584 A1 | GS YUASA INT LTD | Active material particles, electrode, power storage element, nonaqueous electrolyte secondary battery, all-solid-state secondary battery, method for producing active material particles, and power storage device |
| WO 2022149877 A1 | LG ENERGY SOLUTION LTD | Electrolyte for lithium-sulfur battery, and lithium-sulfur battery comprising same |
| WO 2022158153 A1 | DENSO CORP | Heat management system |
| WO 2022163061 A1 | GS YUASA INT LTD | Power storage element and method for using power storage element |
| WO 2022163252 A1 | NGK INSULATORS LTD | Method for recycling lithium-ion secondary battery |
| WO 2022169216 A1 | SAMSUNG SDI CO LTD | Electrode for rechargeable lithium battery and rechargeable lithium battery comprising same |
| WO 2022153869 A1 | AUTONETWORKS TECHNOLOGIES LTD | Battery sensing unit and bus bar module for battery |
| WO 2022163579 A1 | PANASONIC IP MAN CO LTD | Nonaqueous electrolyte secondary battery and method for manufacturing same |
| WO 2022172325 A1 | HONDA MOTOR CO LTD | Traveling vehicle |
| WO 2022172326 A1 | HONDA MOTOR CO LTD | Travel vehicle |
| WO 2022149964 A1 | LG ENERGY SOLUTION LTD | Battery pack and vehicle including same |
| WO 2022172618 A1 | PANASONIC IP MAN CO LTD | Battery and method for producing battery |
| WO 2022147778 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery heat management system, method for controlling battery heating system, apparatus, device, and medium |
| WO 2022163853 A1 | IBIDEN CO LTD | Flameproof sheet, assembled battery, and battery pack |
| WO 2022177241 A2 | LG ENERGY SOLUTION LTD | Battery management apparatus |
| WO 2022163480 A1 | MURATA MANUFACTURING CO | Secondary battery, electronic device, and electric tool |
| WO 2022178271 A1 | MASSACHUSETTS INST TECHNOLOGY | Ultra-high-voltage rechargeable batteries with sulfonamide-based electrolytes |
| WO 2022149768 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack comprising same |
| WO 2022149897 A1 | LG ENERGY SOLUTION LTD | Battery module, battery pack including same, and manufacturing method thereof |
| WO 2022149903 A1 | LG ENERGY SOLUTION LTD | Electrode connecting apparatus and method, and notching equipment comprising same |
| WO 2022149888 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack including same |
| WO 2022172613 A1 | PANASONIC IP MAN CO LTD | Battery, battery system and method for producing battery |
| WO 2022149933 A1 | LG CHEMICAL LTD | Positive electrode active material, and positive electrode and lithium secondary battery comprising same |
| WO 2022153820 A1 | AUTONETWORKS TECHNOLOGIES LTD | Cell balance device, battery sensing unit, and battery management system |
| WO 2022154108 A1 | IBIDEN CO LTD | Heat transfer suppression sheet for battery pack, and battery pack |
| WO 2022154311 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack comprising same |
| WO 2022158856 A1 | LG ENERGY SOLUTION LTD | Sub-cell, manufacturing method thereof, and cylindrical secondary battery, battery pack, and automobile comprising sub-cell |
| WO 2022170487 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery cell, battery, electrical device, and method for manufacturing battery cell |
| WO 2022172718 A1 | MURATA MANUFACTURING CO | Secondary battery |
| WO 2022149887 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack including same |

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| WO 2022146056 A1 | LG ENERGY SOLUTION LTD | Preparation method for separator for electrochemical device and separator for electrochemical device prepared by same preparation method |
| WO 2022164243 A1 | LG ENERGY SOLUTION LTD | Negative electrode and secondary battery comprising same |
| WO 2022164107 A1 | LG ENERGY SOLUTION LTD | Electrolyte for lithium-sulfur battery and lithium-sulfur battery comprising same |
| WO 2022149751 A1 | LG ENERGY SOLUTION LTD | Electrolyte for lithium secondary battery and lithium secondary battery comprising same |
| WO 2022169191 A1 | SAMSUNG SDI CO LTD | Electrode plate spreading device for secondary battery |
| WO 2022170552 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery cell, battery, electrical device, and manufacturing apparatus and method for battery cell |
| WO 2022149831 A1 | LG ENERGY SOLUTION LTD | Battery pack, electric wheelchair, and vehicle |
| WO 2022154360 A1 | LG ENERGY SOLUTION LTD | Battery cell exterior inspection system |
| WO 2022177080 A1 | LS CABLE & SYSTEM LTD | Electric vehicle battery module frame having enhanced impact resistance |
| WO 2022164244 A1 | LG ENERGY SOLUTION LTD | Negative electrode, and secondary battery comprising same |
| WO 2022161270 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Lithium ion battery, battery module, battery pack and electricity utilization apparatus |
| WO 2022169078 A1 | SAMSUNG SDI CO LTD | Secondary battery |
| WO 2022169111 A1 | LG ENERGY SOLUTION LTD | All-in-one electrode stack unit, method for manufacturing same, and lithium secondary battery including same |
| WO 2022173963 A1 | ENERGY EXPLORATION TECH INC | Lithiated metal organic frameworks with a bound solvent for secondary battery applications |
| WO 2022177395 A1 | LG ENERGY SOLUTION LTD | Battery pack and vehicle comprising same |
| WO 2022149968 A1 | LG ENERGY SOLUTION LTD | Battery pack and vehicle comprising same |
| WO 2022149896 A1 | LG ENERGY SOLUTION LTD | Battery module and battery pack including same |
| WO 2022177378 A1 | LG ENERGY SOLUTION LTD | Electrode assembly and battery, and battery pack and vehicle comprising same |
| WO 2022149951 A1 | LG CHEMICAL LTD | Method for preparing cathode active material and cathode active material |
| WO 2022164127 A1 | KERI KOREA ELECTROTECHNOLOGY RES INST | Digital twin device and digital twin-based battery temperature monitoring method |
| WO 2022169186 A1 | LG ENERGY SOLUTION LTD | Composition for preparing solid electrolyte, solid electrolyte using same, and secondary lithium battery |
| WO 2022164247 A1 | LG ENERGY SOLUTION LTD | Nonaqueous electrolytic solution for lithium secondary battery, and lithium secondary battery comprising same |
| WO 2022164212 A1 | LG ENERGY SOLUTION LTD | Separator for lithium secondary battery and manufacturing method therefor |
| WO 2022149477 A1 | AIST | Oxide solid electrolyte, electrode mixture, and all-solid lithium ion battery |
| WO 2022149912 A1 | LG ENERGY SOLUTION LTD | Positive electrode and lithium secondary battery comprising same |
| WO 2022165728 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrode assembly, battery cell, battery, and device and method for manufacturing electrode assembly |
| WO 2022177360 A1 | LG ENERGY SOLUTION LTD | Secondary battery, and battery pack and vehicle comprising same |
| WO 2022145659 A1 | SAMSUNG ELECTRO MECH | All-solid-state battery |
| WO 2022145636 A1 | LG ENERGY SOLUTION LTD | Battery module comprising multiple parallel battery cells |
| WO 2022149876 A1 | LG ENERGY SOLUTION LTD | Electrolyte for lithium-sulfur secondary battery and lithium-sulfur secondary battery comprising same |
| WO 2022145688 A1 | LG ENERGY SOLUTION LTD | Method for assigning communication id and battery pack providing the method |
| WO 2022140902 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Negative electrode plate and preparation method therefor, secondary battery, battery module, battery pack and apparatus |

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| WO 2022160212 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Method and apparatus for detecting anomaly of lithium battery, and battery management system and battery system |
| WO 2022145645 A1 | KOREA ELECTRONICS TECHNOLOGY | Active material coated with solid electrolyte, electrode, and all-solid-state battery using same |
| WO 2022164281 A1 | LG ENERGY SOLUTION LTD | Positive electrode, and lithium secondary battery comprising same |
| WO 2022170485 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Battery, electric device, and method and device for manufacturing battery |
| WO 2022145993 A1 | LG ENERGY SOLUTION LTD | Anode and manufacturing method therefor |
| WO 2022145627 A1 | SAMSUNG ELECTRO MECH | All solid state battery |
| WO 2022145691 A1 | SAMSUNG ELECTRO MECH | All-solid-state battery |
| WO 2022145997 A1 | LG ENERGY SOLUTION LTD | Secondary battery |
| WO 2022145706 A1 | SAMSUNG ELECTRO MECH | All-solid-state battery |
| WO 2022145831 A1 | LG ENERGY SOLUTION LTD | Battery diagnosis device, battery diagnosis method, battery pack and electric vehicle |
| WO 2022149780 A1 | LG ENERGY SOLUTION LTD | Battery device and voltage supply method |
| WO 2022147732 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Electrode assembly, battery cell, battery, and method and device for manufacturing electrode assembly |
| WO 2022160181 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Insulating film, battery cell, battery and electric device |
| WO 2022145830 A1 | LG ENERGY SOLUTION LTD | Battery diagnosis device, battery diagnosis method, battery pack, and electric vehicle |
| WO 2022158948 A2 | LG ENERGY SOLUTION LTD | Battery management device and method |
| WO 2022158862 A2 | LG ENERGY SOLUTION LTD | Electrode assembly, battery, and battery pack and vehicle comprising same |

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SUPERCONDENSADORES

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|-------------------------|--|
| WO 2022185778 A1 | FUJIFILM CORP | Aluminum substrate for collector, capacitor, secondary cell, and method for manufacturing aluminum substrate for collector |
| WO 2022186151 A1 | GS YUASA INT LTD | Non-aqueous electrolyte power storage element and method for manufacturing same |
| WO 2022176836 A1 | GS YUASA INT LTD | Power storage element |
| WO 2022154005 A1 | TOYOTA JIDOSHOKKI KK | Power storage cell and power storage device |
| WO 2022176492 A1 | MURATA MANUFACTURING CO | Battery electrode, manufacturing method therefor, and battery |
| WO 2022168845 A1 | GS YUASA INT LTD | Nonaqueous electrolyte power storage element and power storage device |
| WO 2022149454 A1 | GS YUASA INT LTD | Negative electrode active material for nonaqueous electrolyte power storage elements, negative electrode for nonaqueous electrolyte power storage elements, nonaqueous electrolyte power storage element, and power storage device |

[...volver a CONTENIDO](#)

SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|------------------|---|
| WO 2022194357 A1 | VOLVO TRUCK CORP | An electrically powered trailer with an endurance braking function |
| WO 2022161602 A1 | VOLVO TRUCK CORP | An electrical wheel module for acceleration and braking of a heavy-duty vehicle |
| WO 2022177491 A1 | SCANIA CV AB | Method and control device for controlling regenerative braking in a vehicle |

[...volver a CONTENIDO](#)

MÁQUINAS ELÉCTRICAS

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|--|--|
| WO 2022184484 A1 | THYSSENKRUPP PRESTA AG | Electric motor for a motor-vehicle steering system, and motor-vehicle steering system |
| WO 2022144610 A1 | FAHIMI MAHDI | DC three-phase electric motor with disk-shaped coil technique for use in electric vehicles |
| WO 2022184390 A1 | BAYERISCHE MOTOREN WERKE AG | Monitoring device for an electric energy storage device, comprising a molded part, electric energy storage device, and motor vehicle |
| WO 2022192881 A1 | OMNI POWERTRAIN TECH LLC | Electric drivetrain |
| WO 2022190183 A1 | NISSAN MOTOR | Rotating electrical machine |
| WO 2022180001 A1 | BROSE FAHRZEUGTEILE SE & CO KG WUERZBURG | Cooling fan module for a motor vehicle |
| WO 2022194640 A1 | VALEO EQUIP ELECTR MOTEUR | Rotary electric machine |
| WO 2022188925 A1 | SCHAEFFLER TECHNOLOGIES AG | Electric machine, method for controlling an electric machine, computer program product, and control unit |
| WO 2022188926 A1 | SCHAEFFLER TECHNOLOGIES AG | Electric machine, method for controlling an electric machine, computer program product, and control unit |
| WO 2022194740 A1 | VALEO EQUIP ELECTR MOTEUR | Rotor for a rotary electric machine |
| WO 2022176829 A1 | TOYOTA MOTOR CO LTD | Rotor |
| WO 2022161573 A1 | SCHAEFFLER TECHNOLOGIES AG | Electric machine and drive train for a hybrid-electric or fully-electric motor vehicle |
| WO 2022168009 A1 | TEXA DYNAMICS S R L | Method for producing a stator for electric motor |
| WO 2022162599 A1 | AMER SPA | End cap for electric motors, and motor unit comprising an electric motor associated with said end cap |
| WO 2022144936 A1 | FLY TECH CORPORATION SRLS | Battery group and storage battery system for electric vehicles |
| WO 2022152719 A1 | VALEO SYSTEMES THERMIQUES | Device for the thermal management of an electric or electronic element for a motor vehicle |
| WO 2022171677 A1 | VITESCO TECHNOLOGIES GERMANY GMBH | Control module for a vehicle with at least an electric motor and a transmission |
| WO 2022173403 A1 | MPG MAKINE PRODUEKSIYON GRUBU MAKINE IMALAT SANAYI VE TICARET ANONIM SIRKETI | Electrical heavy-duty axle with independent suspension |
| WO 2022152718 A1 | VALEO SYSTEMES THERMIQUES | Device for the thermal management of an electric or electronic element for a motor vehicle |
| WO 2022171671 A1 | VITESCO TECHNOLOGIES GERMANY GMBH | Control module for a vehicle with at least an electric motor and a transmission |
| WO 2022165301 A1 | REA MAGNET WIRE COMPANY INC | Magnet wire with high partial discharge inception voltage (pdiv) |
| WO 2022163410 A1 | DENSO CORP | Drive control device and drive control method |
| WO 2022168021 A1 | OPTIPHASE DRIVE SYSTEM INC | Multiphase electric machine |

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CONVERTIDORES, INVERSORES

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|---|--|
| WO 2022184293 A1 | VALEO SIEMENS EAUTOMOTIVE GERMANY GMBH | Common mode filter with y-capacitors and separating switch for decoupling same from the reference potential |
| WO 2022188950 A1 | HUAWEI DIGITAL POWER TECH CO LTD | Double-reference pulse-width modulation for torque minimization of ac machines |
| WO 2022185652 A1 | HITACHI LTD | Railway vehicle drive system and railway vehicle drive method |
| WO 2022188063 A1 | HUAWEI DIGITAL POWER TECH CO LTD | Photovoltaic system, inverter and control method |
| WO 2022187647 A1 | UNIV COLUMBIA | Systems and methods for stacked multi-level power converter implementations with linear scaling |
| WO 2022176223 A1 | NIDEC CORP | Motor control device |
| WO 2022175702 A1 | NISSAN MOTOR | Hybrid vehicle control method and hybrid vehicle control device |
| WO 2022181921 A1 | HYUNDAI TRANSYS INC | Hybrid vehicle |
| WO 2022171238 A1 | SCHAEFFLER TECHNOLOGIES AG | Inverter device and electric drive arrangement |
| WO 2022156988 A1 | VITESCO TECH GMBH | Galvanically coupling DC-to-DC converter and vehicle electrical system |
| WO 2022157349 A1 | SIEMENS AG | Bi-directional power converter |
| WO 2022157350 A1 | SIEMENS AG | Bi-directional power converter |
| WO 2022157240 A1 | VITESCO TECH GMBH | Galvanically isolating bidirectional on-board electrical system dc converter having auxiliary flyback converter for preloading from the low voltage side |
| WO 2022162964 A1 | MURATA MANUFACTURING CO | Power converter |
| WO 2022157348 A1 | SIEMENS AG | Bi-directional power converter |
| WO 2022190988 A1 | PANASONIC HOLDINGS CORP | Power conversion device |
| WO 2022176589 A1 | HITACHI LTD | AC-DC converter |
| WO 2022153587 A1 | HITACHI ASTEMO LTD | Control device and control method for dynamo-electric machine |
| WO 2022176723 A1 | DENSO CORP | Electric power converting device |
| WO 2022168575 A1 | AUTONETWORKS TECHNOLOGIES LTD | Electronic device module and power source system |
| WO 2022149526 A1 | PANASONIC IP MAN CO LTD | Electric power converting device |
| WO 2022152382 A1 | HUAWEI DIGITAL POWER TECH CO LTD | Apparatus and method for controlling hybrid three-port dc-dc power converters |
| WO 2022180896 A1 | HITACHI ASTEMO LTD | Inverter control device and electric vehicle system |
| WO 2022140875 A1 | UNIV TECNICA FEDERICO SANTA MARIA UTFSM | Partial power dc-dc converter with controllable topology |
| WO 2022163019 A1 | HITACHI ASTEMO LTD | Power conversion device |
| WO 2022158195 A1 | SANDEN HOLDINGS CORP | Inverter device |
| WO 2022178028 A1 | AMPLIFY POWER INC | Aggregating capacity for depot charging |
| WO 2022149834 A1 | LG INNOTEK CO LTD | Converter |
| WO 2022153723 A1 | FUJI ELECTRIC CO LTD | Power conversion device, control device for power conversion device, and power conversion control method |
| WO 2022152677 A1 | ACM ADAPTIVE CITY MOBILITY GMBH | Exchangeable tray |
| WO 2022153620 A1 | HITACHI ASTEMO LTD | Power conversion device |
| WO 2022149525 A1 | PANASONIC IP MAN CO LTD | Power conversion device |
| WO 2022168869 A1 | AISIN CORP | Rotary electric machine control system |
| WO 2022157739 A1 | AUCKLAND UNISERVICES LTD | Duty cycle control in polyphase wireless power transfer systems |
| WO 2022155266 A1 | TAE TECH INC | Systems, devices, and methods for module-based cascaded energy systems |
| WO 2022149366 A1 | DENSO CORP | Electric power converting device |

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RECARGA DE BATERÍAS

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|--|---|
| WO 2022187926 A1 | DE OLIVEIRA EMERSON CORDEIRO | Electric vehicle charger |
| WO 2022190330 A1 | HONDA MOTOR CO LTD | Battery transport support system, battery transport support device, battery transport support method, and battery transport support program |
| WO 2022157100 A1 | ZAHNRADFABRIK FRIEDRICHSHAFEN | Device for an electric vehicle, electric vehicle having a device, and method for providing charging energy |
| WO 2022167735 A1 | PSA AUTOMOBILES SA | Method for estimating a state of charge of an electric vehicle battery for a remote monitoring system |
| WO 2022167897 A1 | GRAF IND S P A | Rechargeable metal air flow battery and related charging station |
| WO 2022142455 A1 | CHINA UNIONPAY CO LTD | Charging system for electric vehicle and charging method therefor, gateway, and charging power supply |
| WO 2022175591 A1 | VAANANEN MIKKO KALERVO | Method and means for electric vehicle battery charging |
| WO 2022173211 A1 | LG INNOTEK CO LTD | Electric vehicle charging controller |
| WO 2022160189 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Power conversion device precharging method and power conversion device |
| WO 2022160182 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Charging method and power conversion device |
| WO 2022160186 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Charging method and power conversion device |
| WO 2022160187 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Power supply control method for power conversion device, and power conversion device |
| WO 2022160190 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Charging method, battery management system for traction battery, and charging pile |
| WO 2022160188 A1 | CONTEMPORARY AMPEREX TECHNOLOGY CO LTD | Charging method, battery management system of power battery, and charging pile |
| WO 2022164414 A2 | ESKISEHIR TEKNİK UNIV | An electric vehicle charging system |

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CAMBIO DE BATERÍAS

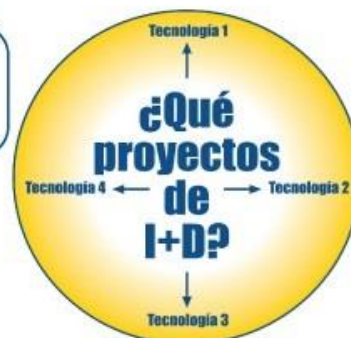
| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|------------------------------------|---|
| WO 2022152675 A1 | ACM ADAPTIVE CITY MOBILITY GMBH | Trolley with replaceable rechargeable batteries for supply of an electric vehicle |
| WO 2022152676 A1 | ACM ADAPTIVE CITY MOBILITY GMBH | Rechargeable-battery replacement box on the roof of an electric vehicle |
| WO 2022143948 A1 | AULTON NEW ENERGY AUTOM TECH GROUP | Battery swapping station |
| WO 2022143877 A1 | AULTON NEW ENERGY AUTOM TECH GROUP | Off-station charging control method and system, electronic device, and storage medium |

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