

### Boletín V COCHE ELÉCTRICO

4º trimestre 2024

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### Vigilancia Tecnológica

### **Noticias**

El 25 de noviembre, el presidente del Gobierno, Pedro Sánchez, recibió en la Moncloa al consejero delegado de <u>Stellantis</u>, Carlos Tavares, para analizar los retos del sector del automóvil, el impulso al vehículo electrificado y los planes de inversión del grupo.

El presidente del Gobierno puso en valor la apuesta decidida del Ejecutivo por la electrificación del sector de la automoción, con más de 5.500 millones de euros de fondos públicos destinados a la reindustrialización del sector, en la que destaca el PERTE del Vehículo Eléctrico y Conectado. La última convocatoria de este proyecto estratégico (PERTE VEC III) se resolverá a finales de año. También está previsto el lanzamiento de una cuarta convocatoria, dotada con 1.250 millones de euros próximamente.

El grupo Stellantis, que incluye marcas como Citroën, Peugeot, Opel, Fiat, Alfa Romeo o Jeep, entre otras, produjo el año pasado más de un millón de vehículos en España, y ha sido adjudicatario de 357,8 millones de euros, a través de diferentes convocatorias del PERTE VEC y del PERTE de descarbonización en diversos proyectos de sus tres plantas en España (Vigo, Madrid y Figueruelas (Zaragoza).

El 12 de diciembre el Ministro de Industria y Turismo, Jordi Hereu se reunió con el presidente de <u>ANFAC</u>, Josep María Recasens, para tratar el Proyecto de Ley de Industria y analizar la situación del sector de la automoción.

Durante el encuentro, se analizó la situación del sector de la automoción en España, así como la reciente firma del acuerdo entre la empresa Stellantis y el fabricante de baterías CATL, que se viene a sumar a acuerdos como el de Ebro

Motors y Chery o a la gigafactoría de baterías de PowerCo, filial de Volkswagen, en Sagunto. Por último, abordaron las medidas para seguir impulsando la demanda del vehículo eléctrico conectado en España y la propuesta del canciller alemán, Olaf Scholz, de implementar un plan de ayudas europeas para la adquisición de vehículos eléctricos.

El 24 de diciembre se publicó en el <u>BOE</u> nº 309 el Real Decreto-ley 9/2024, de 23 de diciembre, cuya Disposición final décima anuncia una nueva ampliación del plazo de vigencia del programa MOVES III, hasta el 30 de junio de 2025.

**BOLETINES OEPM** 

NIPO: 220-24-012-0

# OEPM

### **CONTENIDO:**

- TECNOLOGÍAS VEHICULARES
  - o Baterías
  - Supercondensadores
  - Sistemas de recuperación de energía, p.ej. frenos regenerativos
  - o Máquinas eléctricas
  - o Convertidores, inversores
- INFRAESTRUCTURAS DE CARGA
  - Recarga de baterías
  - Cambio de baterías

### Solicitudes de Patente Publicadas

Los datos que aparecen en la tabla corresponden a una selección de las solicitudes de patentes publicadas durante el trimestre. Se puede acceder al documento completo haciendo doble clic sobre el mismo.

### **BATERÍAS**

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<u>WO2024239974A1</u>	D AUS ENERGY STORAGE TECH XIAN CO LTD [CN]	Battery pack and electric vehicle
WO2024220126A1	GARRETT TRANSPORTATION I INC [US]	Battery thermal controls for batteries used in electric vehicles and power wall applications
WO2024258934A1	MIDTRONICS INC [US]	Electric vehicle maintenance device for low voltage electrical system
WO2024225574A1	LG ENERGY SOLUTION LTD [KR]	Battery pack, charging method therefor and electric vehicle comprising same
WO2024225998A1	BUKAN SADIN [TR]	Battery cooling system that can work synchronously as an integrated battery and dynamo for electric vehicles
WO2024197907A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Silicon-containing compound, electrolyte for secondary battery, and secondary battery and electric device
WO2024252187A1	MILOSIU JOHANN MARIUS [DE]	Charging method for electric cars, and electric cars with interchangeable batteries
WO2024197793A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Battery module, secondary battery, and electric device
WO2024248253A1	LG ENERGY SOLUTION LTD [KR]	Battery array
WO2024212188A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Electrolyte solution, battery cell, battery, and electric device
WO2024242057A1	PANASONIC IP MAN CO LTD [JP]	Electrode for secondary batteries, and secondary battery
WO2024201588A1	NISSAN MOTOR [JP]	Control device and method for determining allowable output power of battery
WO2024204146A1	TOKYO SEIMITSU CO LTD [JP]	Charge/discharge test system
WO2024258144A1	SK ON CO LTD [KR]	Electrode for lithium metal battery and lithium metal battery comprising same
WO2024263700A1	FCA US LLC [US]	Battery pack having structural support assembly for electrified vehicle
WO2024225852A1	LG CHEMICAL LTD [KR]	Cathode active material, cathode and lithium secondary battery
WO2024248255A1	KOREA ZINC CO LTD [KR]	Treatment method of waste battery
WO2024205174A1	SAMSUNG SDI CO LTD [KR]	Lithium metal battery, and method for manufacturing lithium metal battery anode included therein
WO2024210357A2	LG ENERGY SOLUTION LTD [KR]	Separator for electrochemical device and electrochemical device comprising same
WO2024228601A1	LG ENERGY SOLUTION LTD [KR]	Separator for electrochemical device and electrochemical device comprising same
WO2024221838A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Polymer and preparation method therefor, gel polymer electrolyte, battery, and electrical device
WO2024221262A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Electrolyte solution, metal battery and preparation method therefor, and electrical device
WO2024237425A1	LG ENERGY SOLUTION LTD [KR]	Automatic separation jig for manufacturing battery module
WO2024237483A1	LS E MOBILITY SOLUTIONS CO LTD [KR]	Battery disconnect apparatus
WO2024217014A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Positive electrode active material for sodium metal battery, positive electrode sheet, battery cell, sodium metal battery, and electric device

















WO2024253405A1	LG ENERGY SOLUTION LTD [KR]	Battery cell thickness measuring device and lamination device for secondary batteries, including same
WO2024253290A1	LG ENERGY SOLUTION LTD [KR]	Battery pack and vehicle comprising same
WO2024214483A1	PANASONIC IP MAN CO LTD [JP]	Nonaqueous electrolyte secondary battery
WO2024214586A1	PANASONIC IP MAN CO LTD [JP]	Secondary battery
WO2024258033A1	LG ENERGY SOLUTION LTD [KR]	Battery module and battery pack including same
WO2024209887A1	DENSO CORP [JP]	Battery diagnosis device and program
WO2024244419A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Pole piece, electrode assembly, battery cell, battery, and electrical device
WO2024253289A1	LG ENERGY SOLUTION LTD [KR]	Battery module, battery pack, and vehicle comprising same
WO2024207812A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Battery separator and manufacturing method therefor, secondary battery, and electric device
WO2024262004A1	NISSAN MOTOR [JP]	Positive electrode for secondary battery, secondary battery using same, and method for manufacturing secondary battery
WO2024225862A1	LG CHEMICAL LTD [KR]	Positive electrode active material, positive electrode, and lithium secondary battery
WO2024221435A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Silicon-carbon composite material and preparation method therefor, negative electrode sheet, secondary battery, and electrical apparatus
WO2024252780A1	PANASONIC IP MAN CO LTD [JP]	Battery manufacturing method and battery
WO2024238937A2	UNIV TEXAS [US]	Modified inorganic solid-state electrolytes (sses) for lithium, sodium, and potassium batteries
<u>WO2024244455A1</u>	SUNWODA MOBILITY ENERGY TECHNOLOGY CO LTD [CN]	Battery pack
WO2024212946A1	HANGZHOU JIANDE SHENGKAI NEW MAT CO LTD [CN]	Metal negative electrode protective film, secondary battery and electric device
<u>WO2024243727A1</u>	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Lithium-sodium composite manganese-based material and preparation method therefor, positive electrode sheet, secondary battery, and electrical device
WO2024225572A1	UNIV KOREA RES & BUS FOUND [KR]	Anode for lithium secondary battery and method for manufacturing same
WO2024225856A1	LG CHEMICAL LTD [KR]	Cathode active material, cathode, and lithium secondary battery
WO2024225859A1	LG CHEMICAL LTD [KR]	Positive electrode active material, positive electrode, and lithium secondary battery
WO2024207858A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Core-shell structure composite material, preparation method therefor, use thereof, secondary battery and electric device
<u>WO2024224481A1</u>	HITACHI HIGH TECH CORP [JP]	Battery management device and battery management method
WO2024248417A1	POSCO FUTURE M CO LTD [KR]	Anode active material for lithium secondary battery, manufacturing method therefor, and lithium secondary battery comprising same
WO2024258036A1	SK ON CO LTD [KR]	Battery cell comprising cover including cooling passage, and battery device comprising same
WO2024230121A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Battery and electric device
WO2024225858A1	LG CHEMICAL LTD [KR]	Cathode active material, cathode, and lithium secondary battery
WO2024208355A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Positive electrode material and battery comprising same, and electric device
WO2024212947A1	HANGZHOU JIANDE SHENGKAI NEW MAT CO LTD [CN]	Negative-electrode enhancement film for secondary battery, and secondary battery and electric apparatus
WO2024225849A1	LG CHEMICAL LTD [KR]	Cathode active material, cathode, and lithium secondary battery
WO2024239723A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Pressure sensor, battery cell, and electrical device







Oficina Española

de Patentes y Marcas













WO2024248567A1	LG CHEMICAL LTD [KR]	Positive electrode active material, and positive electrode and lithium secondary battery comprising same
WO2024198255A1	BYD CO LTD [CN]	Battery pack and electric apparatus
WO2024259652A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Pre-stacking device, pre-stacking method, and battery processing apparatus
WO2024210396A1	LG ENERGY SOLUTION LTD [KR]	Battery pack
WO2024207352A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Positive electrode sheet and preparation method therefor, battery cell, battery, and electric device
WO2024204934A1	COSMOS LAB CO LTD [KR]	Aqueous electrolyte for zinc-bromine battery and zinc-bromine battery comprising same
WO2024262638A1	ORLIB CO LTD [JP]	Secondary battery
WO2024205329A1	LG ENERGY SOLUTION LTD [KR]	Lithium secondary battery electrode plate and lithium secondary battery comprising same
WO2024248563A1	LG CHEMICAL LTD [KR]	Cathode active material, preparation method therefor, and cathode and lithium secondary battery which comprise same
WO2024245295A1	BYD CO LTD [CN]	Drive system and vehicle
WO2024216447A1	BEIJING EASPRING MAT TECH CO LTD [CN]	Multi-element positive electrode material and preparation method therefor, and lithium ion battery
WO2024258162A1	LG CHEMICAL LTD [KR]	Lithium silicon oxide, anode comprising same, and lithium secondary battery comprising anode
WO2024262762A1	LG ENERGY SOLUTION LTD [KR]	Simulator of battery pack
WO2024230042A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Battery detection chip, battery cell, and electric device
WO2024200172A1	CAMBRIDGE DISPLAY TECH LTD [GB]	Sodium salts having borate or aluminate anions
WO2024219869A1	SK ON CO LTD [KR]	Method for manufacturing lithium secondary battery electrode and method for manufacturing secondary battery including lithium secondary battery electrode
WO2024257987A1	LG ENERGY SOLUTION LTD [KR]	Battery pack and vehicle including same
WO2024259649A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Adhesive application apparatus, adhesive application method and battery machining device
WO2024262683A1	KOREA MARITIME UNIV IND ACAD [KR]	Flame-retardant sheet composition for lithium secondary battery, characterized by delaying spread of fire, and flame-retardant sheet using same
WO2024257997A1	LG ENERGY SOLUTION LTD [KR]	Busbar assembly and battery pack including same
WO2024210400A1	SK ON CO LTD [KR]	Tape attachment apparatus and tape attachment method
WO2024221320A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Secondary battery and electrical apparatus
WO2024262889A1	LG ENERGY SOLUTION LTD [KR]	System for manufacturing secondary battery and method for manufacturing secondary battery
WO2024257988A1	LG ENERGY SOLUTION LTD [KR]	Battery management device, battery system, and battery module assembly balancing method
WO2024255162A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Taping device and battery production system
WO2024253075A1	MAXELL LTD [JP]	All-solid-state battery and method for manufacturing same
WO2024228552A1	LG ENERGY SOLUTION LTD [KR]	Positive electrode active material, positive electrode slurry comprising same, manufacturing method thereof, and positive electrode and lithium secondary battery comprising same
WO2024248449A1	SK ON CO LTD [KR]	Monomer for electrolyte, electrolyte for secondary battery comprising same, manufacturing method thereof, and lithium secondary battery comprising same
WO2024207179A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Secondary battery and preparation method therefor, and electric device
WO2024205269A1	SK ON CO LTD [KR]	Battery cell and battery device
WO2024215942A1	MOXION POWER CO [US]	Battery retention system with integral structural members
WO2024221997A1	HUAWEI DIGITAL POWER	Battery, battery pack, electronic device, and energy storage
	TECH CO LTD [CN]	system















WO2024261047A1	GRAENGES AB [SE]	Aluminium alloy foil
WO2024231452A1	JT INT SA [CH]	An aerosol generation device
WO2024262523A1	JFE STEEL CORP [JP]	Positive electrode active material for sodium-ion secondary battery, method for manufacturing positive electrode active material for sodium-ion secondary battery, and sodium-ion secondary battery
WO2024248433A1	SK ON CO LTD [KR]	Porous organic-inorganic composite electrolyte membrane, manufacturing method therefor, and lithium secondary battery comprising same
WO2024240895A1	UMICORE NV [BE]	Aliovalently substituted argyrodite-type solid electrolytes
WO2024219815A1	LG CHEMICAL LTD [KR]	Heat control member comprising wet-gel blanket
WO2024253495A1	UNIV KOREA RES & BUS FOUND [KR]	Electrolyte using high-dielectric-constant zwitterionic material, and preparation method therefor
<u>WO2024257743A1</u>	MITSUBISHI GAS CHEMICAL CO [JP]	Method for manufacturing Igps-type solid electrolyte
WO2024205306A1	RES INST IND SCIENCE & TECH [KR]	Olivine cathode active material for lithium secondary battery and manufacturing method thereof
WO2024219669A1	LG ENERGY SOLUTION LTD [KR]	Separator for electrochemical device and electrochemical device comprising same
WO2024199698A1	INTEL CORP [US]	Energy supply- and demand-based configuration and operation of electric vehicles
<u>WO2024243870A1</u>	DAINIPPON INK & CHEMICALS [JP]	Method for producing garnet-type oxide solid electrolyte
WO2024215890A1	GLENCORE LTD [US]	Recovery of lithium from lithium iron phosphate black mass
WO2024239307A1	DOW GLOBAL TECHNOLOGIES LLC [US]	Compositions for the formation of battery shutdown layers
WO2024262230A1	SANDEN CORP [JP]	Heat management system
WO2024258103A1	SK ON CO LTD [KR]	Electrode
WO2024262940A1	LG CHEMICAL LTD [KR]	Binder composition for separator of electrochemical device, and separator of electrochemical device, comprising same
WO2024237496A1	LAKE TECH LTD [KR]	Apparatus for mass-producing lithium sulfide
WO2024204581A1	UNIV OSAKA PUBLIC CORP [JP]	Solid electrolyte material, solid electrolyte composite, electrode, and method for producing solid electrolyte material
WO2024260003A1	HUAWEI TECH CO LTD [CN]	Mobile apparatus, charging control method, and chip
WO2024262972A1	POSCO HOLDINGS INC [KR]	Valuable metal recovery composition, and method for recovering valuable metal
WO2024225035A1	JFE STEEL CORP [JP]	Valuable element recovery method
WO2024253494A1	UNIV KOREA RES & BUS FOUND [KR]	Zwitterionic polymer-based aqueous electrolyte having high potential stability window through control of hydration layer and manufacturing method thereof
WO2024253190A1	ASAHI CHEMICAL IND [JP]	Method for produced non-aqueous lithium power storage element with restored capacity, and non-aqueous lithium power storage element with restorable capacity
WO2024203898A1	IDEMITSU KOSAN CO [JP]	·
WO2024225041A1	JFE STEEL CORP [JP]	Method for recovering valuable element
WO2024237718A1	LG CHEMICAL LTD [KR]	Positive electrode material, and positive electrode and lithium secondary battery comprising same
		secondary battery comprising same
		manufactured thereby
	LG CHEMICAL LTD [KR]	secondary battery
	BASS CO LTD [KR]	
WO2024253269A1	EP CHEMTECH CO LTD [KR]	Method for preparing carbonate solution of alkali metal or alkaline earth metal bis(fluorosulfonyl)imide
WO2024216024A1	CUBERG INC [US]	Methods and systems for restoring lithium metal liquid- electrolyte electrochemical cells
WO2024224223A1	H55 SA [CH]	Insulation fault detection device, electrical power supply system, and a method for detecting an insulation fault
WO2024243719A1	DOW GLOBAL TECHNOLOGIES LLC [US]	Ceramic slurry compositions
WO2024237715A1  WO2024215184A1  WO2024237716A1  WO2024219905A1  WO2024253269A1  WO2024216024A1  WO2024224223A1	LG CHEMICAL LTD [KR]  AHN SUNGHEE [KR]  LG CHEMICAL LTD [KR]  BASS CO LTD [KR]  EP CHEMTECH CO LTD [KR]  CUBERG INC [US]  H55 SA [CH]  DOW GLOBAL	secondary battery comprising same Positive electrode material, and positive electrode and li secondary battery comprising same Method for manufacturing porous film, and porous film manufactured thereby Cathode material, cathode comprising same, and lithiun secondary battery Method for preparing oxide-based solid electrolyte poword Method for preparing carbonate solution of alkali metal alkaline earth metal bis(fluorosulfonyl)imide Methods and systems for restoring lithium metal liquid-electrolyte electrochemical cells Insulation fault detection device, electrical power supply and a method for detecting an insulation fault Ceramic slurry compositions



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Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO2024209476A1	ARIEL SCIENT INNOVATIONS LTD [IL]	Supercapacitor comprising nanostructure of a metal-chalcogen compound
WO2024225238A1	TOMIYAMA PURE CHEMICAL IND LTD [JP]	Electrolyte for power storage device, reinforcing agent, electrolyte solution, and power storage device using same
WO2024263226A1	GRAYSON MICHAEL CURTIS [US]	Powering and recharging long range electric vehicles
WO2024225237A1	TOMIYAMA PURE CHEMICAL IND LTD [JP]	Electrolyte for power storage device, reinforcing agent, electrolyte solution, and power storage device using same
WO2024240344A1	ABB SCHWEIZ AG [CH]	Electrochemical device provided with a safety arrangement for a pouch cell
WO2024257397A1	TOYOTA JIDOSHOKKI KK [JP]	Device for manufacturing power storage module and method for manufacturing power storage module
WO2024201265A1	SEMICONDUCTOR ENERGY LAB [JP]	Secondary battery
WO2024211042A2	FASTCAP SYSTEMS CORP [US]	Electrodes for batteries
WO2024232277A1	TOYOTA JIDOSHOKKI KK [JP]; TOYOTA MOTOR CO LTD [JP]	Power storage module
WO2024204284A1	KURARAY CO [JP]	Electrode, method for producing electrode, and electrochemical device
WO2024252821A1	TOYOTA JIDOSHOKKI KK [JP]	Power storage device
WO2024253726A1	FASTCAP SYSTEMS CORP [US]	Energy storage devices with swellable electrodes
WO2024206397A2	FASTCAP SYSTEMS CORP [US]	Energy storage devices
WO2024219399A1	RESONAC PACKAGING CORP [JP]	Exterior material for electricity storage device
<u>WO2024252997A1</u>	ENEOS MAT CORPORATION [JP]	Power storage device binder composition, power storage device electrode slurry, power storage device electrode, and power storage device
WO2024236454A1	SEMICONDUCTOR ENERGY LAB [JP]	Battery module
WO2024226205A2	NOHMS TECH INC [US]	Functionalized phosphine oxides and functionalized phosphine sulfides for lithium-ion batteries
WO2024252996A1	ENEOS MAT CORPORATION [JP]	Binder composition for power storage devices, slurry for power storage device electrodes, power storage device electrode, and power storage device

### SISTEMAS DE RECUPERACIÓN DE ENERGÍA; FRENOS REGENERATIVOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO2024240773A1	AMPERE SAS [FR]	Method for managing regenerative braking of a motor vehicle
WO2024260943A1	AMPERE SAS [FR]	Method for managing regenerative braking of an electric or hybrid motor vehicle
WO2024228077A1	TORINO POLITECNICO [IT]	Electric vehicle and method of controlling thereof
WO2024232096A1	HITACHI INDUSTRIAL PRODUCTS LTD [JP]	Electric vehicle
WO2024256702A1	BREMBO SPA [IT]	Vehicle and method for single pedal driving
WO2024218738A1	EPROINN S R L [IT]	Computer-implemented method for managing the propulsion sources of a hybrid vehicle in order to maximise the energy recovery of such a hybrid vehicle during its travel.

### MÁQUINAS ELÉCTRICAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO2024213603A1	ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]	Electric drive axle for an electric vehicle
WO2024213693A1	ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]	Drive axle for an electric vehicle
WO2024245957A1	VALEO EAUTOMOTIVE GERMANY GMBH [DE]	Electric motor assembly with a connector holder
WO2024223152A1	BAYERISCHE MOTOREN WERKE AG [DE]	Method for operating an electric vehicle, and electric vehicle
WO2024251954A1	MOVING MAGNET TECH [FR]	Electric motor with improved assembly
WO2024251958A1	MOVING MAGNET TECH [FR]	Electric motor with improved assembly
WO2024232028A1	MITSUBISHI ELECTRIC CORP [JP]	Electric vehicle drive device
WO2024246251A1	BROSE FAHRZEUGTEILE SE & CO KG BAMBERG [DE]	Method for emitting an acoustic warning signal during operation of an electric-motor-driven actuator for a motor vehicle and electric-motor-driven actuator
WO2024220160A1	NIKOLA CORP [US]	Torque management in multi-motor electric vehicle
WO2024208643A1	VITESCO TECH GMBH [DE]	Method for positioning a rotor shaft of an electric motor, computer program, computer program product, system, and vehicle
WO2024226022A1	FNSS SAVUNMA SISTEMLERI A S [TR]	Adaptive power management system for armoured series hybrid vehicles
WO2024236675A1	MITSUBISHI ELECTRIC CORP [JP]	Motor unit
WO2024261123A1	VILLENEUVE PIERRE [FR]	Compressed air/electricity drive train, transformation kit and vehicle fitted with such a drive train
WO2024217824A1	BAYERISCHE MOTOREN WERKE AG [DE]	Housing for a machine, machine comprising a housing, and motor vehicle comprising a machine
WO2024240847A1	POLESTAR PERFORMANCE AB [SE]	A connector unit and an electric vehicle and an electric motor comprising such
WO2024230886A1	SCHAEFFLER TECHNOLOGIES AG [DE]	Rotor and electric machine
WO2024201183A1	STELLANTIS EUROPE S P A [IT]	An electric motor-vehicle frame equipped with a system for activating the electrical connection of the battery assembly
<u>WO2024251524A1</u>	AMPERE SAS [FR]	Element for distributing a flow within a hollow shaft
WO2024218226A1	ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]	Electric machine with rotating transformer and vehicle with an electric motor of this type
WO2024209627A1	TOSHIBA KK [JP]	Stator for rotating electrical machine
WO2024205753A1	GARRETT TRANSPORTATION I INC [US]	E-machine system with rotor arrangement in fluid circuit for cooling and lubrication
WO2024227808A1	NOVADRIVES IP 1 GMBH [DE]	
WO2024260734A1	BAYERISCHE MOTOREN WERKE AG [DE]	Housing for a machine, machine comprising a housing, and motor vehicle comprising a machine
WO2024252296A1	SAFEFIELDS TECH LTD [IL]	System for cancelling magnetic field
WO2024214370A1	JFE STEEL CORP [JP]	Non-oriented electromagnetic steel sheet
WO2024255968A1	SCHAEFFLER TECHNOLOGIES AG [DE]	Stator assembly and method for producing a stator retainer
WO2024235388A1	SCHAEFFLER TECHNOLOGIES AG [DE]	Method for closed-loop control of mechanically field- weakened electric machines

### **CONVERTIDORES, INVERSORES**

WO2024210876A2 WO2024210876A2 WO2024210876A1 WO2024210876A1 WO2024210876A1 WO2024210876A1 WO20242307019A1 WO20242508019A1 WWARNANANANANANANANANANANANANANANANANANA	Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO2024202019A1   NISSAN MOTOR IP    Electric vehicle   WO2024202019A1   MITSUBISH IELECTRIC   Electric car control system   CORP IP    WO202423640A1   VITESCO   TECHNOLOGIES USA   LLC [UIS]   WO202423640A1   SUBARU CORP IP    Electric car control system   Corp IP    WO202423640A1   HUAWEI DIGITAL   POWER TECH CO LTD (CN)   Power controller, vehicle brake system and electric vehicle   Electric motor controller, vehicle brake system and electric vehicle   GERMANY GMBH [DE]   WO2024218661A1   VALEO EAUTOMOTIVE   GERMANY GMBH [DE]   WO2024208630A1   AMPERE SAS [FR]   System for supplying power to consumers of an electric vehicle   WO2024208630A1   AMPERE SAS [FR]   System for supplying power to consumers of an electric vehicle   WO2024258850A1   HUAWEI DIGITAL   POWER TECH CO LTD (CN)   WO2024215091A2   SOLUM CO LTD [KR]   Resonant converter and electric vehicle charger comprising   Same   WO2024247001A1   SINDENGEN   SINDENGEN   SINDENGEN   ELECTRIC MFG [JP]   WO20242703462A1   OS YUASA INT LTD [JP]   WO20242703462A1   OS YUASA INT LTD [JP]   WO20242703462A1   OS YUASA INT LTD [JP]   WO2024273046A1   UNIV KOBE NAT UNIV   CORP [JP]   WO2024273046A1   UNIV KOBE NAT UNIV   CORP [JP]   WO20242238951A2   TAU MOTORS INC [US]   Systems and method for control of networked power   CORP [JP]   WO20242238951A2   TAU MOTORS INC [US]   Systems and method for control of networked power   Electric Wincile   Power converter   Control device and electric vehicle   WO2024229871A1   HITACHI ASTEMO LTD   DENGO CORP [JP]   Power converter   Power converter   Description   WO2024229871A1   HITACHI ASTEMO LTD   Control device and electric vehicle   WO2024229871A1   FIREDRICH SAFEND LTD   Control device and electric vehicle   WO2024229871A1   FIREDRICH SAFEND LTD   Denso Corp [JP]   WO2024229871A1   FIREDRICH SAFEND LTD   Denso Corp [JP]   Power converter and method for operating the DC voltage converter   Description   WO2024260623A1   MAPERE SAS [FR]   Power converter and method for operating the DC voltage converter   Power converte	WO2024210876A2	OTOMOBILI GIRISIM GRUBU SANAYI VE TICARET ANONIM	An inverter for optimizing the energy used in electric vehicles
CORP [JP]  WO202423648A1  VITESCO TECHNOLOGIES USA LLC [US]  WO2024236648A1  SUBARU CORP [JP]  WO2024258986A1  HUAWEI DIGITAL POWER TECH CO LTD [CN]  WO2024258648A1  VALEO EAUTOMOTIVE GERMANY GMBH [JE]  WO202426630A1  AMPERE SAS [FR] Tybrid vehicle, and drive system for electric vehicle, electric vehicle, and drive system assembly method  WO202425886A1  HUAWEI DIGITAL POWER TECH CO LTD [CN]  WO202425886A1  AMPERE SAS [FR] Tybrid vehicle, and method for onseging the power supply of such a vehicle  WO202425886A1  HUAWEI DIGITAL POWER TECH CO LTD [CN]  WO202425886A1  HUAWEI DIGITAL POWER TECH CO LTD [CN]  WO202425886A1  WO202425886A1  WO202425886A1  SULIM CO LTD [KR] Resonant converter and electric vehicle charger comprising same  WO20242403462A1  SULIM CO LTD [KR]  WO20242403462A1  SYSTEM Resonant converter and electric vehicle charger comprising same  WO2024203462A1  SYSTEM Resonant converter and electric vehicle charger comprising same  WO2024203462A1  SYSTEM Resonant converter and electric vehicle charger comprising same  WO2024203462A1  SYSTEM Resonant converter and electric vehicle charger comprising same  WO2024203462A1  SYSTEM FOR [JP]  WO202420346A2A1  UNIV KOBE NAT UNIV CORP [JP]  WO202423036A1  TAU MOTORS INC [US]  WO2024220802A2  UNIV COLUMBIA [US]  WO2024220802A2  UNIV COLUMBIA [US]  WO2024220802A2  UNIV COLUMBIA [US]  WO2024220802A3  WINTERCHNOLOGIES AG [DE]  WO202422997A1  WITTACHH ASTEMO LTD [JP]  WO202422997A1  WITTACHH ASTEMO LTD [JP]  WO2024229953A1  BOSCH GMBH TREE  Power converter and method for operating the DC voltage converter and method for operati	WO2024241382A1		Electric vehicle
### TECHNOLOGIES USA LLC [UIS]    WO2024236848A1	WO2024202019A1		Electric car control system
WO2024258648A1   SUBARU CORP [JP]   WO2024258686A1   HUAWE IDIGITAL POWER TECH CO LTD [CN]   WO2024213661A1   VALEO EAUTOMOTIVE GERMANY GMBH [DE]   STAND GERMANY GMBH [DE]   WO2024208630A1   AMPERE SAS [FR]   WO202425895A1   HUAWE DIGITAL POWER TECH CO LTD [CN]   System for electric vehicle, electric vehicle, and drive system sensembly method which, and method for managing the power supply of such a vehicle. WO202425895A1   HUAWE DIGITAL POWER TECH CO LTD [CN]   WO2024259895A1   HUAWE DIGITAL POWER TECH CO LTD [CN]   WO2024275091A2   SOLUM CO LTD [KR]   Resonant converter and electric vehicle charger comprising same   WO20242701A1   SHINDENGEN ELECTRIC MFG [JP]   WO202427001A1   SHINDENGEN ELECTRIC MFG [JP]   WO2024237348A1   UNIV KORS NAT UT DID [JP]   WO202423734BA1   UNIV KORS NAT UT DID [JP]   WO202423734BA1   UNIV KORS NAT UT DID [JP]   Power converter   WO202423734BA1   UNIV KORS NAT UT DID [JP]   Power converter   WO2024238951A2   UNIV COLUMBIA [US]   Systems and methods for control of networked power converters   WO2024220802A2   UNIV COLUMBIA [US]   Systems and methods for control of networked power converters   Power converter control with second order harmonic injection   UP]   WO2024220802A2   UNIV COLUMBIA [US]   Systems and methods for control of networked power converters   Power converter and coil unit   UP]   WO2024220802A2   UNIV COLUMBIA [US]   Power converter and method for operating the DC voltage converter   WO2024229895A1   MITSUBISH ELECTRIC MOBILITY CORP [JP]   WO2024228664   DENSO CORP [JP]   Power converter and method for operating the DC voltage converter   WO202425866A1   DENSO CORP [JP]   Power converter and method for operating the DC voltage converter   WO20242586A1   ELECTRIC HYDROGEN   ERECTRICHSHAFEN [DE]   WO202422684A1   AMPERE SAS [FR]   Method for actuating an electric machine by switching between provided the provided provided provided in the supply system of a vehicle and corresponding power supply system of a vehicle and corresponding power supply system of a vehicle	WO2024233749A1	TECHNOLOGIES USA	
WO2024213661A1	WO2024236648A1		Charging apparatus for electric vehicle
GERMANY GMBH [DE] WO2024208630A1  AMPER SAS [FR] System for supplying power to consumers of an electric or hybrid vehicle, and method for managing the power supply of such a vehicle WO2024259895A1  HUAWEI DIGITAL POWER TECH CO LTD [CN] WO2024215091A2  SOLUM CO LTD [KR] Same WO202424001A1  SHINDENGEN ELECTRIC MFG [JP] WO202423704BA1  DENSO CORP [JP] WO202423704BA1  UNIV KOBE NAT UNIV CORP [JP] WO202423704BA1  UNIV KOBE NAT UNIV CORP [JP] WO202423734BA1  UNIV KOBE NAT UNIV CORP [JP] WO202423954BA1  WO202422997A1  TAU MOTORS INC [US] WO2024220902A2  UNIV COLUMBIA [US] WO202422997A1  SCHAFFLER TECHNOLOGIES AG [DE] WO202420187A1  MITSUBISH HEAVY IND LTD [JP] WO202420386A1  DENSO CORP [JP] Power converter and electric vehicle charger comprising same  Control module for permanent magnet motor for traveling of two-wheeled electric vehicle electric vehicle  WO202423704BA1  UNIV KOBE NAT UNIV CORP [JP] WO202423704BA1  UNIV GOLUMBIA [US] Power converter control of networked power converters  WO202422997A1  SCHAFFLER TECHNOLOGIES AG [DE]  WO202422187A1  MITSUBISH HEAVY IND LTD [JP] WO2024225846A1  DENSO CORP [JP] Power converter and electric vehicle electric vehicle  WO202425846A1  DENSO CORP [JP] Power converter and method for operating the DC voltage converter and method for operating the DC voltage converter and coil unit  UC voltage converter and method for operating the DC voltage converter and program  WO202425846A1  MITSUBISH LECTRIC MORE MATERIAL POWER Converter and method for operating the DC voltage converter and program  WO202425846A1  MO202425846A1  AMPERE SAS [FR]  Method for actuating an electric wehicle drive device, and power supply system of a vehicle and corresponding power supply system of a vehicle and an asynchronous pulse patterns  Method for actuating an electric machine by switching between two synchronous pulse patterns  Method for actuating an electric machine by switching between program power supply system of a vehicle and an asynchronous pulse pattern  METHOD AND AND PROMETRATION  Method for ac	WO2024259896A1	POWER TECH CO LTD	
hybrid vehicle, and method for managing the power supply of such a vehicle  WO2024259895A1  HUAWEI DIGITAL POWER TECH CO LTD [CN]  SOLUM CO LTD [KR]  Resonant converter and electric vehicle charger comprising same  WO2024215091A2  SOLUM CO LTD [KR]  Resonant converter and electric vehicle charger comprising same  WO202427001A1  SHINDENGEN [JP]  WO2024230462A1  GS YUASA INT LTD [JP]  WO2024237042A1  DENSO CORP [JP]  WO2024237042A1  DENSO CORP [JP]  WO2024237042A1  UNIV KOBE NAT UNIV Interleaved high-voltage ratio bidirectional DC-DC converter converters  WO2024238951A2  TAU MOTORS INC [US]  WO2024220802A2  UNIV COLUMBIA [US]  WO2024220802A2  UNIV COLUMBIA [US]  WO20242210005A1  HITACHI ASTEMO LTD  LTD [JP]  WO202422997A1  SCHAEFFLER  TECHNOLOGIES AG  [DE]  WO2024220802A1  WITSUBISH HEAVY IND  LTD [JP]  WO202422666633A1  BOSCH GMBH ROBERT  [DE]  WO2024252846A1  DENSO CORP [JP]  Power converter and coil unit  WO2024252846A1  DENSO CORP [JP]  Power converter and method for operating the DC voltage converter  WO2024252846A1  DENSO CORP [JP]  Power conversion device and program  Power conversion device and program  Power conversion device and program  Power conversion device manufactivating method  WO2024249953A1  RIVIAIN IP HOLDINGS  LLC [US]  WO2024240466A1  ZAHNRADFABRIK  FRIEDRICHSHAFEN [DE]  BAYERISCHE  MO20242266121A1  BAYERISCHE  MO20242268121A1  BAYERISCHE  MO2024226812A1  MERCIA INC. [US]  WO2024228818A1  ELECTRIC HYDROGEN  CO [US]  WO2024228818A1  ELECTRIC HYDROGEN  CO [US]  ELectric roller  ELectric coller  ELectric coller  ELectric coller  ELectric letto Ltd  DENSO CORP [JP]  Decoupled control of a power converter and an asynchronous pulse pattern  AMERICA INC. [US]  Method for actuating an electric machine by switching between asynchronous pulse pattern  AMERICA INC. [US]  Method for actuating an electric machine by switching between asynchronous pulse pattern  AMERICA INC. [US]  WO2024228818A1  ELECTRIC HYDROGEN  CO [US]  ELECTRIC HYDROGEN  CO [US]	WO2024213661A1		
POWER TECH CO LTD   CN     CN	WO2024208630A1	AMPERE SAS [FR]	hybrid vehicle, and method for managing the power supply of
same   same   same	WO2024259895A1	POWER TECH CO LTD [CN]	
ELECTRIC MFG [JP]   two-wheeled electric vehicle   WO202423762A1   GS YUASA INT LTD [JP]   Multiphase lic resonance converter   WO2024237348A1   UNIV KOBE NAT UNIV   Interleaved high-voltage ratio bidirectional DC-DC converter   CORP [JP]   WO2024238951A2   TAU MOTORS INC [US]   Systems and methods for control of networked power converters   WO2024220802A2   UNIV COLUMBIA [US]   Power converter control with second order harmonic injection   WO2024210005A1   HITACHI ASTEMO LTD   [JP]   WO202422997A1   SCHAEFFLER   TECHNOLOGIES AG   [DE]   WO202420297A1   MITSUBISHI HEAVY IND   LTD [JP]   WO2024206623A1   BOSCH GMBH ROBERT   DE   WO202425846A1   DENSO CORP [JP]   Power converter and method for operating the DC voltage converter   WO202425846A1   MITSUBISHI ELECTRIC   MOBILITY CORP [JP]   Power conversion device and program   WO20242466A1   MITSUBISHI ELECTRIC   MOBILITY CORP [JP]   Power conversion device and program   WO20242363A1   MITSUBISHI ELECTRIC   MOBILITY CORP [JP]   Power conversion device and program   WO2024249953A1   RIVIAN IP HOLDINGS   LLC [US]   WO2024266170A1   AMPERE SAS [FR]   Method for determining voltage setpoints of converters of a power supply system   WO2024266A1   BAYERISCHE   MOTOREN WERKE AG   [DE]   WO2024266121A1   BAYERISCHE   MOTOREN WERKE AG   [DE]   WO202428818A1   ZAHNRADFABRIK   Method for actuating an electric machine by switching between   FRIEDRICHSHAFEN [DE]   Method for actuating an electric machine by switching between   FRIEDRICHSHAFEN [DE]   Method for actuating an electric machine by switching between   FRIEDRICHSHAFEN [DE]   Method for actuating an electric machine by switching between   FRIEDRICHSHAFEN [DE]   Saykan JUKOGYO KK   JP]   Decoupled control of a power converter utilizing delta motor and inverter   Decoupled control of a power converter   Decoupled cont	WO2024215091A2		
Power converter   W02024237348A1		ELECTRIC MFG [JP]	two-wheeled electric vehicle
WO2024238951A2			
CORP [JP] TAU MOTORS INC [US] W02024220802A2 UNIV COLUMBIA [US] Power converter control with second order harmonic injection W02024210005A1 HITACHI ASTEMO LTD [JP] W0202422997A1 SCHAEFFLER TECHNOLOGIES AG [DE] W02024202187A1 INTSUBISHI HEAVY IND LTD [JP] W020242060623A1 BOSCH GMBH ROBERT [DE] W0202425846A1 DENSO CORP [JP] Power converter and coil unit LTD [JP] W02024252463A1 WTSUBISHI ELECTRIC MOBILITY CORP [JP] W02024252463A1 W1TSUBISHI ELECTRIC MOBILITY CORP [JP] W02024236170A1 AMPERE SAS [FR] W02024236170A1 AMPERE SAS [FR] W02024240466A1 ZAHNRADFABRIK FRIEDRICHSHAFEN [DE] W02024256121A1 BAYERISCHE MOTOREN WERKE AG [DE] W02024240466A1 ZAHNRADFABRIK FRIEDRICHSHAFEN [DE] W020242265922A1 MAGNA POWERTRAIN AMERICA INC [US] MAGNA POWERTRAIN CO [US] W02024228818A1 ELECTRIC HYDROGEN CO (US) W02024228818A1 ELECTRIC HYDROGEN CO (US) W02024228818A1 ELECTRIC HYDROGEN CO (US) ELECTRIC HYDROGEN CO (US) Decoupled control of networked power converter control with second order harmonic injection Converter converter control with second order harmonic injection Power converter and electric vehicle divice inverter DC voltage converter and method for operating the DC voltage converter and electric vehicle drive device, and power conversion device and program  Multiple battery drive system Method for determining voltage setpoints of converters of a power supply system of a vehicle and corresponding power supply system Method for actuating an electric machine by switching between two synchronous pulse patterns  Method and device for the secured operation of an electrical machine  W02024205922A1 MAGNA POWERTRAIN AMERICA INC [US] inverter  Method for actuating an electric machine by switching between the power conversion device and program and program  Method for actuating an electric mac			
Converters		CORP [JP]	
WO202422097A1		TAU MOTORS INC [US]	
Composition			·
TECHNOLOGIES AG [DE]  WO2024202187A1 MITSUBISHI HEAVY IND LTD [JP]  WO2024260623A1 BOSCH GMBH ROBERT [DE] DC voltage converter and method for operating the DC voltage converter  WO2024252846A1 DENSO CORP [JP] Power conversion device and program  WO2024252463A1 MITSUBISHI ELECTRIC MOBILITY CORP [JP] Power conversion device, electric vehicle drive device, and power conversion device manufacturing method  WO2024249953A1 RIVIAN IP HOLDINGS LLC [US] Multiple battery drive system  LLC [US] Method for determining voltage setpoints of converters of a power supply system of a vehicle and corresponding power supply system of a vehicle and corresponding power supply system  WO2024240466A1 ZAHNRADFABRIK FRIEDRICHSHAFEN [DE] two synchronous pulse patterns  WO2024256121A1 BAYERISCHE MOTOREN WERKE AG [DE]  WO2024240468A1 ZAHNRADFABRIK FRIEDRICHSHAFEN [DE] a synchronous pulse pattern and an asynchronous pulse pattern  WO2024205922A1 MAGNA POWERTRAIN AMERICA INC [US]  WO2024228818A1 ELECTRIC HYDROGEN CO [US]  SAKAI JUKOGYO KK [JP]  DC voltage converter and coil unit  DC voltage converter and method for operating the DC voltage converter and method for operating the DC voltage converter and method for operating the DC voltage converter for device, electric vehicle drive device, and power converter on device, electric vehicle drive device, and power converter on device and program  Power conversion device and pro	<u>WO2024210005A1</u>	[JP]	
LTD [JP]   BOSCH GMBH ROBERT   DC voltage converter and method for operating the DC voltage converter   DE   DENSO CORP [JP]   Power conversion device and program   Power conversion device and program   Power conversion device manufacturing method   Power conversion device and program   Power converter   Power con	WO2024222997A1	TECHNOLOGIES AG	
DE  converter	WO2024202187A1		Power converter and coil unit
WO202425463A1   MITSUBISHI ELECTRIC MOBILITY CORP [JP]   Power conversion device, electric vehicle drive device, and power conversion device manufacturing method		[DE]	converter
MOBILITY CORP [JP]   power conversion device manufacturing method			
LLC [US]  MO2024236170A1  AMPERE SAS [FR]  Method for determining voltage setpoints of converters of a power supply system of a vehicle and corresponding power supply system  METHOD FABRIK PRIEDRICHSHAFEN [DE]  MO2024240466A1  BAYERISCHE MOTOREN WERKE AG [DE]  MO2024240468A1  ZAHNRADFABRIK Method for actuating an electric machine by switching between two synchronous pulse patterns  Method and device for the secured operation of an electrical machine  Method for actuating an electric machine by switching between a synchronous pulse pattern and an asynchronous pulse pattern  MO2024240468A1  ZAHNRADFABRIK Method for actuating an electric machine by switching between a synchronous pulse pattern and an asynchronous pulse pattern  MO2024205922A1  MAGNA POWERTRAIN AMERICA INC [US]  MO2024228818A1  ELECTRIC HYDROGEN Decoupled control of a power converter  CO [US]  MO2024241969A1  SAKAI JUKOGYO KK Electric roller	<u>WO2024252463A1</u>		
power supply system of a vehicle and corresponding power supply system    WO2024240466A1	WO2024249953A1		Multiple battery drive system
FRIEDRICHSHAFEN [DE] two synchronous pulse patterns  WO2024256121A1  BAYERISCHE MOTOREN WERKE AG [DE]  WO2024240468A1  ZAHNRADFABRIK FRIEDRICHSHAFEN [DE] a synchronous pulse pattern and an asynchronous pulse pattern  WO2024205922A1  MAGNA POWERTRAIN AMERICA INC [US]  WO2024228818A1  ELECTRIC HYDROGEN CO [US]  WO2024241969A1  SAKAI JUKOGYO KK [JP]  two synchronous pulse patterns  Method and device for the secured operation of an electrical machine  machine  Method and device for the secured operation of an electrical machine  machine  Detactional an asynchronous pulse pattern and an asynchronous pulse pattern  DC fast-charging bidirectional converter utilizing delta motor and inverter  Decoupled control of a power converter  Electric roller	WO2024236170A1	AMPERE SAS [FR]	power supply system of a vehicle and corresponding power supply system
MOTOREN WERKE AG [DE]  WO2024240468A1  ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]  MAGNA POWERTRAIN AMERICA INC [US]  WO2024228818A1  ELECTRIC HYDROGEN CO [US]  WO2024241969A1  SAKAI JUKOGYO KK [JP]  Machine  Method for actuating an electric machine by switching between a synchronous pulse pattern and an asynchronous p	WO2024240466A1		
FRIEDRICHSHAFEN [DE] a synchronous pulse pattern and an asynchronous pulse pattern  WO2024205922A1 MAGNA POWERTRAIN AMERICA INC [US] DC fast-charging bidirectional converter utilizing delta motor and inverter  WO2024228818A1 ELECTRIC HYDROGEN CO [US]  WO2024241969A1 SAKAI JUKOGYO KK [JP]  Electric roller	WO2024256121A1	MOTOREN WERKE AG	
AMERICA INC [US] inverter  WO2024228818A1 ELECTRIC HYDROGEN CO [US]  WO2024241969A1 SAKAI JUKOGYO KK [JP]  ELECTRIC HYDROGEN Decoupled control of a power converter converter converter learner for the converter conver	WO2024240468A1		
CO [US]	WO2024205922A1		inverter
[JP]	WO2024228818A1	CO [US]	Decoupled control of a power converter
WO2024252869A1 ROHM CO LTD [JP] Semiconductor device and vehicle	WO2024241969A1	[JP]	Electric roller
	WO2024252869A1	ROHM CO LTD [JP]	Semiconductor device and vehicle





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WO2024225112A1	AISIN CORP [JP]	Vehicle drive device
WO2024242407A1	SOLUTION X CO LTD [KR]	Inverted buck-boost-type integrated charger
WO2024257176A1	NISSAN MOTOR [JP]	Electric power conversion apparatus
WO2024219146A1	DENSO CORP [JP]	Power conversion device
WO2024247610A1	DENSO CORP [JP]	Charger and program
WO2024214139A1	HITACHI ASTEMO LTD [JP]	Power conversion device
WO2024240479A1	BOSCH GMBH ROBERT [DE]	Supply circuit arrangement for an electric machine and system having the supply circuit arrangement
WO2024237994A1	DIMAAG AI INC [US]	Battery modules with integrated module converters and methods of operating thereof
WO2024202932A1	DENSO CORP [JP]	Power conversion device
WO2024226334A1	BAE SYS CONTROLS INC [US]	Common-mode current sensing system and protection method for power converters
WO2024247680A1	DENSO CORP [JP]	Power conversion device
WO2024252949A1	HITACHI ASTEMO LTD [JP]	Power conversion device and drive device
WO2024203278A1	ROHM CO LTD [JP]	Semiconductor module and vehicle
WO2024214842A1	LG ELECTRONICS INC [KR]	Charging device and vehicle having same
WO2024214458A1	DENSO CORP [JP]	Power supply device and program
WO2024224950A1	DENSO CORP [JP]	Power supply system and power supply control program
WO2024232164A1	HITACHI ASTEMO LTD [JP]	Power conversion device and method for controlling power conversion device
WO2024202838A1	UNIV TOHOKU [JP]	Power module
WO2024241968A1	SAKAI JUKOGYO KK [JP]	Electric roller
WO2024242747A2	POWER SWITCHING LLC [CA]	Isolated buck-boost topologies and control thereof
WO2024220246A1	LESTER ELECTRICAL OF NEBRASKA INC [US]	Method and apparatus to charge extra low voltage batteries
WO2024257263A1	HITACHI ASTEMO LTD [JP]	Power conversion device
<u>WO2024257615A1</u>	HITACHI ASTEMO LTD [JP]	Switching drive apparatus
WO2024219186A1	DENSO CORP [JP]	Power conversion device and program
WO2024246350A1	VALEO EAUTOMOTIVE GERMANY GMBH [DE]	Electrical power supply circuit for a vehicle electrical energy storage unit

### **RECARGA DE BATERÍAS**

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO2024220632A1	ENPHASE ENERGY INC [US]	Methods and apparatus for use with electric vehicles
WO2024258642A1	INCHARGE ENERGY INC [US]	Systems and methods for charging management of electric vehicles
WO2024208264A1	NIO CO LTD [CN]	Battery charging and swapping system
WO2024263548A2	NOCO CO [US]	Flow battery mechanization and control topology
WO2024246246A1	CAPACTECH LTD [GB]	Wireless charging of different types of electric vehicles
WO2024246442A1	STELLANTIS AUTO SAS [FR]	Motor vehicle comprising a hook for holding a cable for charging the traction battery
WO2024225646A1	LG INNOTEK CO LTD [KR]	Vehicle wireless charging device
WO2024217617A1	KIEKERT AG [DE]	Charging connector for electric and hybrid vehicles
WO2024206695A1	KENNEDY MINING LLC [US]	Systems and methods for distributing power between vehicle chargers and hashed data conversion
WO2024215031A1	4DREAM CO LTD [KR]	System for managing electric vehicle charging power on basis of demand response, and method therefor
WO2024239058A1	CI CORP PTY LTD [AU]	Battery fast charging system
WO2024256471A1	MAHLE INT GMBH [DE]	Mobile induction-charging device, inductive charging syste and vehicle having a mobile induction charging device
WO2024244686A1	NIO TECH ANHUI CO LTD [CN]	Battery charging and swapping station
WO2024249208A1	SAGE GEOSYSTEMS INC [US]	Charging station powered by a renewable energy source
WO2024201665A1	SUBARU CORP [JP]	Control device
WO2024248265A1	LG ENERGY SOLUTION LTD [KR]	Vehicle system, charging system, and charging gender
WO2024239059A1	CI CORP PTY LTD [AU]	Automated overhead fast-charging system
WO2024252485A1	HITACHI ASTEMO LTD [JP]	Electric drive device and method for controlling electric dri device
WO2024206505A2	IONTRA INC [US]	Synthesis and envelope rectification for waveforms and the harmonics in a frequency switched topology
WO2024216635A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Charging method and charging apparatus
WO2024200653A1	VITESCO TECH GMBH [DE]	Method for estimating the duration of use of at least one capacitor for an onboard charger
WO2024256764A1	STELLANTIS AUTO SAS [FR]	Robotic device for charging the batteries of an electric or hybrid motor vehicle by induction
WO2024209397A1	BOMBARDIER RECREATIONAL PRODUCTS INC [CA]	System for managing a charging state of an auxiliary batter and vehicle including the system
WO2024199397A1	BYD CO LTD [CN]	Charging apparatus, charging control system, and electric vehicle
WO2024245625A1	MERCEDES BENZ GROUP AG [DE]	Charging system for rechargeable batteries with metal deposition based electrodes
WO2024240711A1	VALEO SYSTEMES THERMIQUES [FR]	Thermal conditioning system for a motor vehicle
WO2024200358A2	VITESCO TECH GMBH [DE]	Method for optimising the service life of at least one capacitor for an on-board charger
WO2024260927A1	BRUSA ELEKTRONIK AG [CH]	Power conversion arrangement with cooling fan
WO2024251517A1	MAHLE INT GMBH [DE]	Stationary inductive charging device
WO2024200353A1	VITESCO TECH GMBH [DE]	Method for controlling the temperature of at least one capacitor for an onboard charger
WO2024229902A1	SHENZHEN HAYLION TECH CO LTD [CN]	Photovoltaic spread-wing container type mobile photovoltaics, energy storage, direct current and flexibility super charging station



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### **CAMBIO DE BATERÍAS**

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO2024259810A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Battery swapping device, battery swapping apparatus and battery swapping station
WO2024250484A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Fire-fighting platform for battery swap station, and battery swap station
WO2024255059A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Attitude adjustment method, attitude adjustment apparatus, control device, and storage medium
WO2024216641A1	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]	Charging method and charging device

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Gamesa LANZAMIENTO





Los ITPs\*\* de la OEPM nos han ahorrado horas de revisión bibliográfica para definir el punto de partida de nuestros proyectos de I+D.

GRIFOLS 75





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







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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