#### SECTOR TRANSFORMADOR PLÁSTICO

NIPO: 116-19-020-3



vigilancia

tecnológica

4º trimestre 2022

La Oficina Española de Patentes y Marcas tiene como misión impulsar la innovación y compartir sus resultados como valores y activos de diferenciación y desarrollo tecnológico. Por ello sus dos objetivos principales son proteger la innovación tramitando distintos títulos de propiedad industrial y difundir la información técnica contenida en las patentes a través de sus servicios de Información Tecnológica, uno de ellos estos Boletines.

En esta nueva andadura del Boletín de Vigilancia Tecnológica del Sector Transformador Plástico que comenzó el primer trimestre de 2021, se ha reestructurado el contenido del Boletín, intentando reflejar la realidad en propiedad industrial de la Industria del Plástico para hacer llegar a las empresas e investigadores del sector, con periodicidad trimestral, una selección de las patentes más recientemente publicadas en el sector de transformación de los materiales plásticos. Las patentes aparecen clasificadas en los siguientes apartados: nuevos productos en los principales sectores de aplicación, invenciones que contribuyen al desarrollo sostenible, mejoras de procesos productivosy nuevos materiales plásticos con propiedades avanzadas. No se ha incluído en este Boletín información sobre la tecnología de impresión 3D, ya que ésta aparece recogida en el boletín de Vigilancia Tecnológica Impresión 3D que la OEPM comenzó a publicar en el 2020

A través de las imágenes que representan cada sección y que aparecen en la portada del Boletín, se accede de forma directa a los contenidos de las mismas, donde encontraremos el número de publicación de cada patente, quien la solicita, una pequeña descripción de la invención y el enlace de acceso al texto completo del documento. De forma complementaria, se incluye una selección de noticias sobre propiedad industrial y actividades relevantes de la OEPM.

Si se desea recibir este Boletín periódicamente basta con cumplimentar el correspondiente formulario de suscripción

#### Contenido



NUEVOS PRODUCTOS



SOSTENIBILIDAD Y ECONOMÍA CIRCULAR



NUEVOS PROCESOS INDUSTRIALES

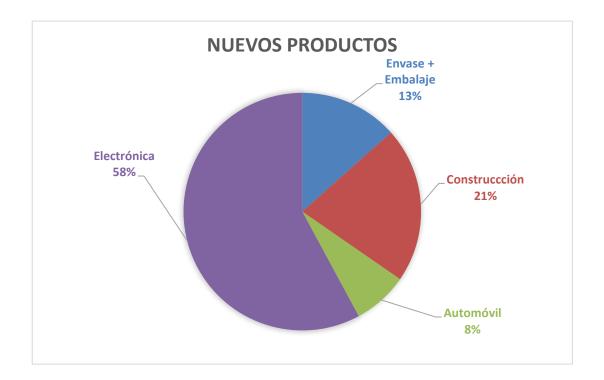


MATERIALES CON PROPIEDADES AVANZADAS O MEJORADAS



## **NUEVOS PRODUCTOS**

En el siguiente gráfico se muestra la distribución de las 19.622 familias de documentos **de** patente recuperadas en este trimestre en el apartado de Nuevos Productos. Tal y como viene ocurriendo, el sector dedicado a la electrónica sigue siendo el que más documentos de patente aporta.



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

#### Envase y Embalaje

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022258231	(CRYO-N) CRYOVAC LLC (BENE-I) BENEDETTI G (BOTT-I) BOTTINI S (LAND-I) LANDOLT S (PALU-I) PALUMBO R (THUE-I) THUERIG P	Heat shrink apparatus for processing E.G. bags, for vacuum packaging of food products, has inlet for receiving containers to be processed, outlet for delivering processed containers, and heat treatment zone



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
NL2027542	(BEEK-N) BEEKENKAMP VERPAKKINGEN BV	Crate for holding food or foodstuff, has specific material which is non-food safe plastic, such as recycled plastic or low-grade plastic, and other material that covers one material viewed from retention area, such that food-safe layer forms retention area
WO2022245930	(CRGI ) CARGILL INC	Method for manufacturing pouch for holding liquid, involves bringing heating surface into contact with front layer or back layer, so as to locally bond together front layer and back layer to form bonds defining boundaries of pour channel
WO2022250537	(DAKL-N) DAKLAPACK EURO BV	Spout-cap unit for use in pouch, has plug element for closing open end of body element such that cap part closes outlet tube of spout part when plug element is received in body element
WO2022242954	(SAEV-N) SAEVJO PLASTIC AB	Snus container for storing packaged snus portions, has second lid pivotably coupled to first lid to be able to pivot about second pivot axis to and from closing position in which second lid closes second compartment
US2022355967	(FOOT-N) FOOTPRINT INT LLC	Compostable single-use container for holding E.G. cannabis pre-rolled products, has tray component comprising planar top surface adhesively bonded to bottom surface of lid component with sustainable adhesive, and chamber for storing object
WO2022195471	(MASC-N) MASCHIO GASPARDO SPA	Raised wall for hopper of fertilizer spreading machine, has bridge which delimits channel between surfaces in which plugging surface of adjacent panels is received for recovering and blocking gap generated by interruption of longitudinal edges

## Construcción Tejados

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
JP2022176469	(SHMC) SHIMIZU CORP	Roof structure has tension element that is inclined so as to gradually move upward towards outer peripheral side of dome frame
KR102474761	(NETF-N) NETFORM R & D CORP	Organic waterproofing layer useful for waterproofing basement, rooftops, exterior walls and tunnels, comprises primer layer, waterproof fabric layer, waterproof adhesive layer and waterproof layer



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2022372344	(JOHM) JOHNS-MANVILLE CORP	Self-adhering roofing membrane comprises polymeric membrane, first adhesive layer disposed on major surface of polymeric membrane, and UV curable adhesive layer disposed on first adhesive layer, where first adhesive layer comprises one or both of hot melt adhesive and butyl rubber-based adhesive
US2017321423	(OWEN) OWENS-CORNING INTELLECTUAL CAPITAL LLC	Self-sealing asphalt shingle for roof, has second thermally activated adhesive material which having minimum activation temperature less than minimum activation temperature of first thermally activated adhesive material
DE102021108434	(BECK-I) BECKER S	Ventilation profile for roof and facade ventilation, has grid element with grid openings which are significantly smaller than ventilation holes is applied to ventilation web with hole pattern such that ventilation web introduces hole pattern with large number of ventilation holes
WO2022192686	(BADI) BASF CORP (BADI ) BASF SE	Multilayer composite for roofing membrane, comprises polymeric membrane, adhesive layer A, hot-melt adhesive layer B and release liner, where adhesive layer A comprises UV curable pressure- sensitive adhesive or water-borne latex adhesive, and layer B comprises UV curable pressure- sensitive adhesive
EP4060105	(ALLS-N) ALLSHIELD HOLDING BV	Water curable sheet material for roofing or cladding material, comprises nonwoven sheet and inorganic particulate binder material comprising combination of alkaline magnesium compound and acidic phosphate compound

## Construcción Conducciones

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2022396934	(DANI-I) DANIEL S L (VASE-I) VASELENIUCK A G	Stub out retainer for retaining pipes or tubing such as polyethylene terephthalate, includes clamp sections having front ends with plate halves and front collar halves, where the clamp sections are configured to mate together such that the plate halves
JP7187724	(KUBO-N) KUBOTA-CHEMIX CO LTD	Resin-made joint for drain-piping structure, has inflow prevention mechanism that prevents inflow of waste water to horizontal branch pipe caused by discharge of drainage to projection



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2022372746	(JANO-I) JANOWSKI B P (TREA-I) TREADO M	Polymer sewer cleanout cap for use in sewer line clean-out unit for locating sewer cleanout by sensing equipment, has cap body provided with proximal surface that is accessible when cleanout cap is in configuration threaded into pipe, where drive block and cap body are aligned along central axis
US2021087770	(ASCH-I) ASCHWANDEN R (CONT-I) CONTI T (FORG-I) FORGER M	Construction system for pre-casting conduit holes in building foundation, has conduit mold that is removed from building foundation to open conduit hole, and conduit that is installed within conduit hole in foundation wall
KR102453347	(SUNG-N) SUNGWOO SLOPE REINFORCEMENT COMPLETION (LEES-I) LEE S B (LEES-I) LEE S (WOOL- I) WOO L P	Composition used for ground reinforcement of steel pipe for tunnel ground reinforcement, comprises water, inorganic filler containing Portland cement and aluminum powder, and polymer modifier containing polyacrylamide and butanediol diglycidyl ether
DE102021204139	(HARD-N) HARDIE EURO GMBH JAMES	Pipe sleeve for external attachment of fire protection layer around pipe E.G. plastic pipe, for ceiling duct, has fastening strips which are connected to sleeve wall and protrude at least in regions in sleeve width direction over sleeve wall, so that pipe sleeve cis suspended from above in ceiling
DE202021102989	(REHA-N) REHAU IND SE & CO KG	Manhole base of manhole for sewage system, has polymer material or contains polymer material, with contact surface, channel, at least two connections for pipes and connecting section for connecting manhole base to another component which is produced by removing material from main portion
US2022341149	(BREG-I) BREGMAN W	Drain for connecting drain pipe of free-standing bathtub to sewer pipe, has interior tube comprising top end to receive drain pipe and bottom end that opens into cavity within exterior tube that extends from top end of exterior tube

## Construcción Muros

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022253532	(COMP) SAINT-GOBAIN GLASS FRANCE	Spacer for insulating glass units, comprises hollow profile extending in longitudinal direction, which is co-extruded from polymer base material and diffusion barrier material



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE202022001977	(GREE-N) GREENS GERMANY GMBH	Insulating tile for insulating building wall E.G building exterior wall in building, is interchangeably adhered to inner wall surface of building wall by adhesive layer such that opening is formed for ventilation between inner wall surface and side of insulating tile
WO2022224099	(TEMA-N) TEMA TECHNOLOGIES & MATERIALS SRL	Insulating and protecting panel used in construction of self-supporting type and constructive element of walls, infill walls, floors of subfloors has central layer in insulating foamed and damp-resistant material and coating central layer
JP7165372	(SADD-N) SADDLE CO LTD (SEIW-N) SEIWA KK	Support unit for mounting solar cell module on roo of freezing/refrigerating warehouse, has hear insulating block that is composed of fiber reinforced resin foam arranged between lower end of supporting material and roof base portion
WO2022223586	(ASAG) AGC FLAT GLASS NORTH AMERICA INC (AGCG) AGC GLASS EURO (ASAG) AGC INC (ASAG) AGC VIDROS DO BRASIL LTDA	Producing laminated vacuum insulating glazing assembly complying with high temperature test or the norm, comprises E.G. stacking vacuum insulating glazing, interunit polymer, and functiona unit, by its creating pre-assembly
WO2022224097	(TEMA-N) TEMA TECHNOLOGIES & MATERIALS SRL	Insulating panel used to construct self-supporting type and used as constructive element of walls floors or subfloors, which is resistant to bending and to damp, is made up of central layer in insulating foamed and damp-resistant material
WO2022220698	(ZIEL-N) ZIELINSKI TERMWALL RAFAL (ZIEL-I) ZIELINSKI R	Heat-insulating inserts for eliminating therma bridges in walls made of blocks, comprise bundle o pipes of cross-section in shape of circle and/or an polygon
CA3152552	(CSRI-N) CSR IND INC	Manufacture of acoustic floor panel used for reducing sound transmission in building, involve combining binding agent and plastic flakes, passing to lamination machine, applying force to create plastic sheet, cutting plastic sheet, and adding acoustic insulator to at least one side of plastic sheet
KR102268226	(NASK-I) NA S K	Interlayer insulation and sound insulation materia useful for floors in buildings comprise impact sound reduction component set on top of slab made up o polystyrene and thermoplastic elastomers E.G olefin-based thermoplastic elastomer
EP4074913	(TIMM-I) TIMMERMAN W	Composite four-sided wall panel for making door/wall opening, has insulating board provided with groove that extends along entire circumference of insulating board
DE102021202720	(KARA-I) KARAKAS H	Substance mixture used for production of building materials E.G. insulating blocks for building construction, has adhesive component, a cemen component, acrylic component, plastic granulate component, perlite rock component and liquite component



## Construcción Ventanas

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022218847	(VKRV) VKR HOLDING AS	Building aperture window, has insulated glass unit arranged in frame, where frame comprises hollow profiles comprising walls of polymer material, and hollow profiles comprises cavities with wood fiber insulation material
WO2022209550	(NTTA) NITTA CORP	Light blocking component used for E.G. windowpane, has temperature-sensitive sheet which is sandwiched by first and second polarization plates, and made of side-chain crystalline polymer which is crystallized at temperature lower than melting point
WO2022228872	(COMP) SAINT-GOBAIN GLASS FRANCE	Glazing E.G. facade glazing, window, door or interior partition, has radio frequency identification (RFID) transponder having dipole antenna and slot antenna, and RFID electronics electrically connected and/or electromagnetically coupled
FR3123937	(BRUN-I) BRUNO B	Aluminum multifunction one-piece window frame for wooden building, has wooden frame provided with top and bottom rails, and joiner trimmer receiving window or door sash and receiving devices for receiving interior and exterior finishes
DE102021205768	(BROS) BROSE FAHRZEUGTEILE SE & CO BAMBERG KG	Window regulator for motor vehicle, has plastic component which is in mechanical physical contact with metal component in sections on contact surface, and microcapsules embedded in plastic material of plastic component, which are filled with lubricant in area of contact surface
DE102021112116	(IEBG-N) IEB GUMMITECHNIK EISELE & CO GMBH	String-shaped profiled sealing element of structural element for window and door, has retaining lip that is transferred by retaining element of receiving groove and spans receiving groove in portions in assembly configuration so that sealing foot is fixed in receiving groove in form-fitting manner
KR20220155706	(KWON-I) KWON H J	Two-side type combination structure of stone panel for curtain wall of building, has spacer formed between C-type panel and glass windows, and reinforcing part located on one side of upper part of partition wall of aluminum frame element
WO2022228871	(COMP) SAINT-GOBAIN GLASS FRANCE	Glazing, E.G. facade glazing, window, door or interior partition, comprises frame, glazing unit, and radio frequency identification transponder(s) with dipole antenna and operating frequency

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE202022103085	(TRAU-N) TRAUB GMBH	Shape aid for wall openings for plastering wall in area of wall opening E.G. window, has multi- component pull-out element which is attached to shaped elements and fastening unit for releasably fixing pull-out element components to one another against displacement
KR102451747	(AHNB-I) AHN B	Bracket for fixing E.G. double-glazed window frame, to wall, has side reinforcement part inserted into reinforcement piece of bracket body, and wall fixing part and reinforcing piece integrally formed by injection molding

#### Automoción

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
JP2022181257	(YAWA) NIPPON STEEL CORP	Roof panel structure for automobile, has inner element that is arranged opposite to inner surface of outer panel element and extended along first direction which is one direction in in-plane direction of panel element
DE102022111302	(ILLT) ILLINOIS TOOL WORKS INC	Interior door handle arrangement installed in interior of vehicle such as car or truck, has actuating section that is provided with carrier section made of first material such as plastic material, and reflective area is connected to carrier section such as reflective surface
EP4095020	(SPIV-I) SPIVAK P	Integrally molded chassis for recreational vehicle E.G. camper van, has chassis integrally molded with base, where chassis includes ribs that extend downward from base, and body includes layers that are molded to form base and chassis
DE102021112765	(PORS) PORSCHE AG F	Vehicle portion structure for storage space of vehicle structure, has tub structure that comprises trough sections connected to one another in load- bearing manner, and trough section made of wood material, so that wood material provides portion of structural integrity of tub structure
KR102469327	(WILL-N) WILL CHEM KOREA CO LTD	Tire sound-absorbing material comprises tire comprising tread portion, bead portions and sidewall portions, sound absorbing material, inorganic pyrolysis type foaming agent and foaming agent comprising coating layer, and stabilizer



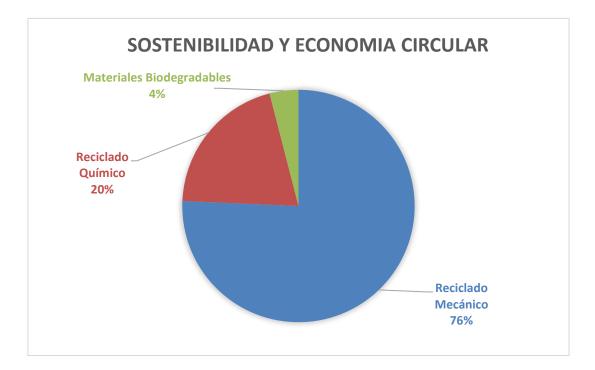
Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102021130442	(NSUM) AUDI AG	Crash management system for motor vehicle, has connecting sections that are materially connected to hollow profile elements, and set up to fix hollow profile elements locally relative to one another, and crash box elements which are formed in one portion with connecting section
JP2022146277	(HISA) HITACHI ASTEMO LTD	Power transmission shaft structure for use in vehicle, has dynamic damper that is held on inner peripheral surface of power transmission shaft, where inner weight is arranged at axial center of tubular portion
DE102021107572	(BAYM) BAYERISCHE MOTOREN WERKE AG	Visual component for motor vehicle, has fiber reinforcement which is formed by visual layer in form of metallized glass fiber layer, and touch display arranged on rear side of fiber-reinforced plastic component facing away from visual layer
WO2022214300	(DRAE) DRAEXLMAIER GMBH LISA	Cross car beam for motor vehicle, has collapsible guiding element comprising guiding surface adapted to guide crash pad during deformation, where cross car beam is formed integrally by fiber reinforced polymer





# SOSTENIBILIDAD Y ECONOMÍA CIRCULAR

En el siguiente gráfico se muestra la distribución de las 1.271 familias de documentos de patente recuperadas en este trimestre en el apartado de Sostenibilidad y economía circular. El reciclado mecánico sigue siendo el sector que mayor actividad innovadora presenta



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

#### Materiales Biodegradables

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022239633	(NIMS) NAT INST MATERIALS SCI (UNTS) UNIV TOKYO SCI FOUND	Complex used for shape memory component, comprises crosslinked polymer having endothermic peak, and metal nanowires, and has conductivity to extent that electrical resistance can be measured at least in state before deformation and in state of being at preset deformation



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
JP7162116	(MIYO) MIYOSHI OIL & FAT CO LTD	Biodegradable resin aqueous dispersion used for E.G. adhesive, comprises polylactic acid resin as biodegradable resin, polyvinyl alcohol having preset average molecular weight and saponification degree according to viscosity average polymerization degree, and polybasic carboxylic acid ester
WO2022225024	(MITU) MITSUBISHI CHEM CORP	Resin composition used as emulsion composition, comprises aliphatic polyester-based resin and additives chosen from cellulose acetate-based resin and ester-based plasticizer
JP2022162532	(NPEC) NIPPON ESTER CO LTD (NIRA) UNITIKA LTD (NIRA) UNITIKA TRADING CO LTD	Biodegradable polyester resin used in fiber, comprises polyester resin comprising dicarboxylic acid component and diol component, containing aliphatic dicarboxylic acid component in total acid component, and sulfur component
WO2022209885	(KURE) KUREHA CORP	Molded product used in downhole tool member for downhole tool E.G. frac plugs and bridge plugs for well drilling, well closure, and fracturing, is made of composition containing glycolic acid polymer, plasticizer, and decomposition accelerator
EP4063442	(EYES-N) EYES REPUBLIC REPUBBLICA OCCHI SRLS	Preparing bioplastic from dairy waste used for producing object or article, by loading dairy waste into apparatus, adding luteolin, cynarine, phytochemase to dairy waste, subjecting to centrifugation and heating, separating from polyhydroxyalkanoate, and drying product
DE102021106156	(SUNT-N) SUNTA CHEM CORP	Biodegradable polymer blend useful as film for building material and for production of artificial leather products, comprises polyvinyl chloride powder, plasticizer and enzyme

#### Reciclado Mecánico

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022250535	(RENE-N) RENEWABALL BV	Recyclable racket sports ball E.G. tennis ball, has hollow core made of composition, where substance is distributed over ball to eye and distribution of substance is configured to provide access to marker substance in orientation of body
WO2022243043	(INSF ) IFP ENERGIES NOUVELLES	Recovery of dialkylphthalate and reusable target PVC plastic used for recycling PVC-based product, involves performing solid-liquid extraction of filler, transforming phthalate of liquid phase to dialkyl phthalate, performing solid-liquid separation and performing liquid-liquid separation



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20220150709	(DION-N) DIONE CO LTD	Manufacture of waste styrene foam solvent for recycling waste styrene foam, involves reducing waste styrene resin using solvent comprising combustible materials, methylene chloride, acetone or chloroform, and acting as flame retardant and preventing dissolved styrene resin from coagulating itself
US2015076744	(ALAD ) ALADDIN MFG CORP (MOHA- N) MOHAWK IND INC (CLAR-I) CLARK T R	Method for manufacturing bulked continuous carpet filament, involves passing polymer melt through multiscrew extruder while maintaining pressure within satellite screw extruders below about eighteen millibars, and forming melt into filament
WO2022230331	(KAOS ) KAO CORP	Producing resin for recycling, involves performing separation step of subjecting resin composition containing resin for recycling and resin to filter treatment to separate resin for recycling, where resins are thermoplastic resins, and increasing dispersed particle size of resin before separation
EP4088923	(OSKA-N) OSKAR GMBH	Molding useful for manufacturing pieces of furniture, comprises an inner layer containing a piece of polyurethane, two outer layers containing aluminum, and an adhesive layer arranged between the outer layers and the inner layer
KR102306757	(CHAW-I) CHA W S (MIND-I) MIN D R	Sidewalk block made of recycled plastic waste comprises first and second particle layers that are alternately arranged in horizontal direction and integrally formed, and whose width is formed to be narrower
DE102021203878	(CONW ) CONTINENTAL REIFEN DEUT GMBH	Method for removing adherent layer of material from surface of tire of vehicle, involves irradiating adhered layer of material with electromagnetic radiation, and mechanically separating bond between surface of vehicle tire and heated adhesive layer of material to remove adhesive layer of material
WO2022207492	(BADI ) BASF SE	Production of particles comprising polyarylene (ether) sulfone for coating, film or foam, foil or membrane, or molding, comprises performing agglomeration of fine-particle material comprising polyarylene (ether) sulfone (educt)
EP4063450	(ALVA-N) ALVAC SA (GREE-N) GREEN WORLD COMPOUNDING SL (GREE-N) GREEN WORLD GRASS SL	Infill used as material for preparing artificial turf, comprises particles having preset particle size, and preset amount of polyolefin base, thermoplastic elastomer compound, densifier and foaming agent
KR102452646	(POLY-N) POLYFOAM CO LTD	Recycled composite material based formwork, has reinforcing bars installed in insertion space, board coupled to surface of frame through fastening unit, and frame whose surface is coated with coating layer through vacuum molding



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4070928	(ICMA-N) ICMA SAN GIORGIO IND COSTR MACCHINE	Apparatus for loading fragments of thermoplastic film in I.E. co-rotating twin-screw extruder, has hopper body functionally connected to screw feeder, so that operating condition of apparatus is maintained
WO2022201994	(MASA-I) MASAKAZU U	Method for separating metal film and resin from synthetic resin waste, involves crushing synthetic resin waste while temperature inside separation chamber is maintained at detachment temperature, and detaching metal foil from synthetic resin by sprinkling water from sprinkler into separation chamber
US2022305695	(QUES-N) QUEST RESOURCE MANAGEMENT GROUP	System for recycling organics from commercial facility, has set of waste producing facilities for producing recyclable waste comprising organics and food packaging, bins arranged at each of waste producing facilities, and recycling facility utilized to separate organics from packaging

## Reciclado Químico

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4101881	(PRPS-N) PRPS IP BV	Recycling polystyrene-based material containing organohalogen flame retardant and/or freonen, by dissolving polystyrene-based material, heating polystyrene to release halogen, contacting halogen with base, removing halogen salt, pyrolyzing polystyrene, and distilling depolymerized mixture
WO2022240253	(GLDS) LX HAUSYS LTD (LXHA-N) LX HAUSYS LTD	Recycled PVC material recycled from waste materials, used for resin molded body such as window, comprises recycled PVC and aluminum
WO2022253953	(ALPL) ALPLA WERKE ALWIN LEHNER GMBH & CO KG	Recycle of packaging waste involves pre-sorting of articles, crushing of articles into flakes, dewatering and drying of flakes, performing solid phase polycondensation in case of PET waste, or performing decontamination in case of PO waste and decoloration of contamination
WO2022251209	(KIMB) KIMBERLY-CLARK WORLDWIDE INC	Method for treatment of post-consumer product comprises contacting post-consumer product with extremophilic polyhydroxyalkanoate depolymerase and microorganism that express extremophilic polyhydroxyalkanoate depolymerase in reaction chamber



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4098689	(NEDE) NEDERLANDSE ORG TOEGEPAST NATUURWETENSCH	Partially separating first and second polyolefin from plastic waste by dissolving first and second polyolefin in solvent, cooling polyolefin solution using cooling surface, precipitating polyolefin on cooling surface, and separating precipitated polyolefin from polyolefin solution
WO2022254390	(RUBB-N) RUBBER CONVERSION SRL	Devulcanizing additive used to devulcanize vulcanized elastomers comprises acid-base adduct obtained starting from monocarboxylic or dicarboxylic organic acid and from urea or substituted derivatives of urea, and peroxide
EP4098688	(NEDE) NEDERLANDSE ORG TOEGEPAST NATUURWETENSCH	Partially separating polycarbonate and component from plastic waste by dissolving polycarbonate and component in solvent, adding weak anti-solvent to polymer solution to precipitate polycarbonate, separating polycarbonate precipitate from polymer solution, and adding strong anti-solvent
WO2022243545	(CARB-N) CARBIOS	Process for degrading plastic product, involves comprising polyester comprising terephthalic acid monomer, performing enzymatic depolymerization of polyester, and implementing enzymatic depolymerization step in reaction medium
WO2022243043	(INSF) IFP ENERGIES NOUVELLES	Recovery of dialkylphthalate and reusable target PVC plastic used for recycling PVC-based product, involves performing solid-liquid extraction of filler, transforming phthalate of liquid phase to dialkyl phthalate, performing solid-liquid separation and performing liquid-liquid separation
US2019016870	(ADIT-N) ADITYA BIRLA CHEM USA LLC (BIRL-N) BIRLA CHEM USA LLC ADITYA (CONN-N) CONNORA TECHNOLOGIES INC	New silicon-containing recyclable polyamino compounds useful in recyclable silicon-containing composition or acid-labile composition
WO2022239902	(LEEB-I) LEE B S	Waste synthetic resin emulsification device has melting furnace receiving solid waste synthetic resin and high-temperature oil and impregnating solid waste synthetic resin into high-temperature oil to melt solid waste synthetic resin, heater having water-tube heat exchanger, and heating facility
WO2022235051	(KRIC) KOREA RES INST CHEM TECHNOLOGY	Extractant used for removing color-expressing foreign substances from colored polymers containing ester functional groups, comprises substituted phenyl compounds
WO2022220634	(KRIC) KOREA RES INST CHEM TECHNOLOGY	Recovering styrene monomer from waste polystyrene by adding solvent comprising tetrahydrofuran and methyltetrahydrofuran and depolymerization catalyst comprising potassium carbonate and potassium hydrogen carbonate to waste polystyrene, and separating and recovering solvent by distilling mixture



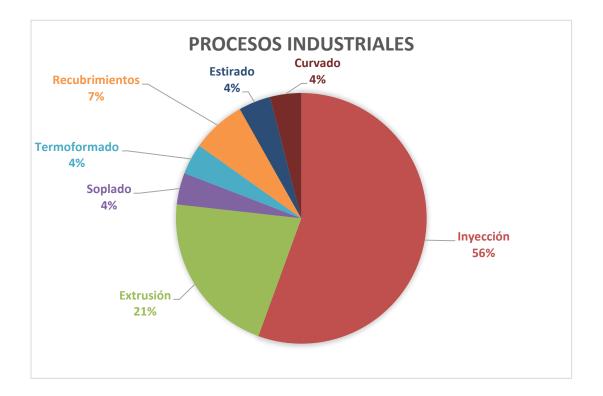
Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2019218362	(CIRC-N) CIRC LLC (TYTO-N) TYTON BIOSCIENCES LLC (TYTO-N) TYTON BIOSCIENCES	Producing cellulose and/or terephthalic acid from waste textile material for E.G., textile, by treating waste textile material comprising cotton or cotton/polyester blend material in subcritical water reactor
WO2022211581	(DAEI-N) DAE IL CORP	Catalyst used for decomposing polyester-based resin, comprises core comprising metal oxide having magnetic, and coating layer provided with catalytic material having catalytic activity for glycolysis reaction of polyester-based resin on surface of core
WO2022182196	(UYKR) UNIV KOREA RES & BUSINESS FOUND	Decomposing polyethylene terephthalate into oligomer, and for producing high value-added compound such as glycolic acid and protocatechuic acid, involves glycolyzing using betaine as catalyst





## **NUEVOS PROCESOS INDUSTRIALES**

En el siguiente gráfico se muestra la distribución de las 11.613 familias de documentos de patente recuperadas en este trimestre en el apartado de Nuevos procesos industriales. Los procesos que mayor actividad innovadora reflejan son el de inyección y extrusión.



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

#### Inyección

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
ES2927791	(TROQ-N) TROQUELES & MOLDES GALICIA TROMOSA SA	Improved skid system for guiding inclined slides in injection molds of plastic materials, has refrigeration or thermal regulation system allowing refrigeration or thermal regulation of sliding part by coolant regulating fluid through rod



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022259331	(FUFA) FANUC CORP	Injection device for injecting resin material to mold, has control unit that controls each portion so as to complete measurement of resin material when load received by drive unit from push-in element positioned at specified position reaches specified value
WO2022256910	(HUIN) HUSKY INJECTION MOLDING SYSTEMS LTD	Core assembly for use in preform mold stack, has retaining pin fitted within bore, where retaining pin includes planar end surface to bear flush against planar pin-contact surface when installed to retain core sleeve with core insert
WO2022233892	(JONS-N) JONSMAN INNOVATION APS	Polymer blend used in medical article, comprises matrix polymer comprising thermoplastic elastomer or thermoplastic polyurethane matrix polymer, and hydrophilic polymer composition comprising polyethylene glycol-plasticizer and polyethylene oxide
WO2022250537	(DAKL-N) DAKLAPACK EURO BV	Spout-cap unit for use in pouch, has plug element for closing open end of body element such that cap part closes outlet tube of spout part when plug element is received in body element
WO2022246249	(MUSE-N) MUSE ENGINE LLC	Molding subsystem for use in injection molding system, has control subsystem including controller connected to actuators of plate such that controller communicates instructions to and/or obtains readings from respective actuator of plate
EP4091792	(WITT-N) WITTMANN BATTENFELD GMBH	Method for operating plastics processing machine E.G. injection molding machine, involves routing hydraulic fluid from piston-cylinder system through turbine, and driving electric generator by turbine
WO2022244221	(JTEK) JTEKT CORP	Injection molding device of resin molded article, has determination unit to determine presence or absence of clogging in gate in resin flow path by adding estimated viscosity of molten resin in die, based on feature amount of flow path pressure data in resin flow path
EP4091791	(ESSI) ESSILOR INT	Method for injection-compression molding lens into mold insert, involves controlling first temperature of first mold side to be in range of specific degrees Fahrenheit greater than second temperature of second mold side
DE102021002458	(FEVF-N) FEV GROUP GMBH (UPTO- N) UPT OPTIK WODAK GMBH	Optical device for use as micro-projector, has first optical lenses that are formed on first surface, second optical lenses which are formed on second surface arranged opposite first surface of substrate, and transparent layer which has predetermined thickness

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022230946	(NIPQ) DAINIPPON PRINTING CO LTD	Substrate molding system for provisioning complex shaped molded components on sheet substrates for manufacturing molded products, has drive- device that drives head to transport sheet and molded product
WO2022230794	(NSSK) NISSEI PLASTICS IND CO LTD	Method for setting molding condition in injection molding machine, involves correcting operation physical quantity that is basis of mold opening pattern based on operation physical quantity, and setting molding condition by corrected operation physical quantity, at time of setting molding condition
WO2022220148	(PPOL) PRIME POLYMER CO LTD	Injection foam molded body used for interior parts of automobiles, comprises propylene-based resin composition
DE102021109601	(MDEL-N) MD ELECTRONIC GMBH (MDEL-N) MD ELEKTRONIK GMBH	Insert E.G. injection molding insert for tool for producing molded components, has opening that is provided on the spreader element, into which the projection of the second component is entered and outer circumference of the spreader element increases and the opening is closed by the projection
WO2022210773	(SUMH) SUMITOMO HEAVY IND LTD	Injection molding machine used as industrial machines and industrial robots used in factories, has mold clamping device, injection device, ejector device, and control device that outputs interrupt request at predetermined intervals and performs control processing in response to interrupt request
WO2022196190	(TOYJ) TOSOH CORP	Metal member-polyarylene sulfide (PAS) resin member complex used as lid member for container, is integrally injection molded product of metal member and PAS resin member, where PAS resin member includes polyarylene sulfide resin and modified ethylene copolymer
WO2022210790	(SUMH) SUMITOMO HEAVY IND LTD	Material preheating device for preheating molding material, has preheating cylinder which has preheating screw disposed inside cylinder, and hot- air heating passage partitioned on outer peripheral side of preheating screw, and through which molding material passes while being heated with hot air
WO2022209602	(KANF) KANEKA CORP	Manufacture of injection-molded article E.G. bottle cap, involves using mold apparatus comprising mold having preset maximum width of parting line in contact with cavity in mold, and gas venting portion, and composition comprising copolymer of 3-hydroxybutyrate units and other hydroxyalkanoate units

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
FR3121734	(CITR) PSA AUTOMOBILES SA	Optical unit for equipping land vehicle, has rib comprises concave housing that is defined during first injection opened on side of external lateral portion that is filled partially with second plastic material during second injection
WO2022215089	(ALAC-N) ALACRIS RES & DEV PRIVATE LTD (CHHA-I) CHHATRALA P K	Apparatus for forming complex cavity molded product based on injection molding, has injection molding mechanism provided with hydraulic mechanism that is connected to dosing unit to supply liquid materials to mold through hose pipe
WO2022208263	(SEOS-I) SEO S K	Method for injecting a magnet insert for forming injection-molded product, involves arranging insert core such that insert magnet is positioned within mold space prior to injection, and molding injection product together with insert magnet
WO2022196280	(SHBU ) SHIBAURA MACHINE CO LTD	Control method for controlling injection molding machine for injecting molten resin material, involves controlling rotational speed and rotational direction of screw so that back pressure becomes target pressure lower than back pressure
WO2022195974	(HITA ) HITACHI LTD	Injection molding condition generation system for generating molding conditions of injection molding machine, generates relational expression on basis of data obtained by associating material characteristic values of resin material
WO2022196281	(SHBU ) SHIBAURA MACHINE CO LTD	Method for molding foamed molded article from molten resin for injection molding machine, involves opening shut off nozzle to inject molten resin with dispersed bubbles to cavity while dispersing atmosphere in molten resin as air bubble
WO2022195534	(SPIA) SIPA SOC IND PROGETTAZIONE & AUTOMAZIONE	Cooling device for cooling preforms or tubular containers, preferably exiting from rotary injection molding apparatus, comprises first longitudinal support member, cooling tubes, and first connection pin
WO2022203135	(KIMH-I) KIM H J	Injection pressure opening/closing control type hot runner valve device for ensuring stable and accurate gate opening/closing operation regardless of low resin pressure, has return spring applies elastic force in downward direction

## Extrusión

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102021112619	(WINM) WINDMOELLER & HOELSCHER KG	Method for producing plastic film from total amount of raw materials, involves calculating one production parameter of film extrusion machine based on film production model, and outputting production parameters of film extrusion machine
WO2022251010	(CORG) CORNING INC	Honeycomb extrusion die for extruding honeycomb structures from ceramic forming batch materials, comprises die body comprising inlet face and exit face, feedholes with feedhole entrances, and die pins extending to exit face
DE102021112620	(WINM) WINDMOELLER & HOELSCHER KG	Method for producing film from total amount of raw materials using film extrusion machine, involves calculating selection or quantity of raw materials from total quantity of raw materials, and output information on selection or quantity of raw materials
WO2022229347	(INEO) INEOS STYROLUTION GROUP GMBH	Producing thermoplastic acrylonitrile-butadiene- styrene molding composition used to produce molded articles comprises mixing components A, B and D by using extruder and removing molding composition from discharge zone of extruder
WO2022229893	(LOHI-N) LOHIA MECHATRONIK PRIVATE LTD	System for controlling bolt of extrusion die for producing plastic film, has die bolt control module for calculating correction factor for bolt based on die bolt influence area, where correction factor is calculated using measured variation
WO2022229385	(VALC-N) VALCUN BV	Extruder for extruding E.G. aluminum material during fused filament fabrication, has heater distanced from another heater by thermal break for separating reservoir in reservoir part close to channel and another part close to outlet
WO2022210647	(KANF) KANEKA CORP	Producing polypropylene resin extruded foam particles by melt-kneading composition containing resin mixture containing polypropylene-based resin having branched structure and foaming agent, extruding composition in liquid phase, and shredding composition to obtain resin extruded foam particles
EP4070928	(ICMA-N) ICMA SAN GIORGIO IND COSTR MACCHINE	Apparatus for loading fragments of thermoplastic film in I.E. co-rotating twin-screw extruder, has hopper body functionally connected to screw feeder, so that operating condition of apparatus is maintained
WO2022211616	(VMIH) VMI HOLLAND BV	System for buffering length of strip between input side portion and output side portion in tire building, has control unit for controlling buffer drive to position buffer element at buffer position based on computed value



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022194925	(AKZE ) AKZENTA PANEELE & PROFILE GMBH	Production plant for producing extruded panels for covering surface of room, has conveyor device for conveying semi-finished product produced as panel-shaped endless profile along conveying direction at defined conveying speed
EP4067046	(MUEL-N) MUELLER GMBH W	Method for rinsing a single-layer extrusion head for producing tubular preforms made of extrudable plastic, involves flushing low channel in channel section between inlet and outlet connected upstream of inlet
WO2022195590	(TAMA-N) TAMA GROUP	Twine useful for binding fibrous material into more compact and easily stacked form, comprises mixture of polypropylene and additives
US2022297355	(AKZE) AKZENTA PANEELE & PROFILE GMBH	Method for starting up production line for manufacturing extruded plates for wood made panels for covering surface of room, involves introducing free end of semi-finished product into separating device when conveyor belt is pulled upstream of separating device away from product downwardly

## Soplado

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
CA3134346	(AKTE) AK TECH LAB INC (AKTE) AOKI TECH LAB INC (AOKI-N) AOKI TECH LAB INC	Injection molding mold for injection stretch blow molding machine for producing E.G. pet bottle, has injection core mold including outer surface of tip portion corresponding to preform bottom portion
US2022348375	(PETF) FINA TECHNOLOGY INC	Injection stretch blow molded used to contain food and consumer product, container comprises surface having static coefficient of friction, and polymeric composition comprising high density polyethylene, where polymeric composition comprises additive, and additive is acid scavenger, and anti-oxidant
US2022347911	(SEIT-N) SEITZ AG EUGEN	Method for actuating valve unit, involves moving piston by first control pressure and second control pressure for closing and opening connection between process pressure inlet and process pressure outlet
WO2022220270	(NASB) NISSEI ASB MACHINE CO LTD	Method for manufacturing resin-made container, involves adjusting temperature of intermediate molded object in first mold, and stretch-blow- molding of intermediate molded object in second mold to manufacture resin-made container



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022210205	(SUMH) SUMITOMO HEAVY IND LTD	Inflation molding apparatus for molding film by extruding molding material, has parameter estimation unit that estimates bubble viscosity parameter based on bubble viscosity estimated by viscosity estimation unit and bubble temperature detected by temperature determination unit
WO2022210198	(KYKO) KYORAKU CO LTD	Impact absorbing structure E.G. vehicle shock absorber for absorbing shock from inside or outside of vehicle, has front-side concave rib and back-side concave rib that are welded to each other at their tips

#### Recubrimientos

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022244811	(ELED) DENKA CO LTD	Composite sheet used in multilayer component for preventing scaling of surface of structure, comprises cured product of adhesive and glass fiber sheet having preset weight per square meter, and having preset tensile elastic modulus
WO2022234479	(MINN) 3M INNOVATIVE PROPERTIES CO	Film E.G. paint film, applying method for vehicle, involves applying pressure against film and toward cutting edge of shim, removing elongated jig from ditch portion, and adhering peripheral edge of film to ditch portion
WO2022210197	(JAPG) ZEON CORP	Laminate used for E.G. optical device, comprises substrate, which is resin layer containing a crystalline alicyclic structure-containing polymer and protective film and having preset ratio of storage modulus and thermal shrinkage rate difference

#### Estirado

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2022395404	(FAMC) FAMECCANICA DATA SPA	Method for producing elastic laminates for manufacturing absorbent sanitary articles I.E. diaper, involves forming elastic laminate by joining first and second non-woven webs through parallel continuous elastic films



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022225450	(THPO-N) THAI POLYETHYLENE CO LTD (FLAN-I) FLANIGAN Y	Biaxially oriented polypropylene film used for multilayer film, and article for packaging, comprises composition comprising polypropylene and beta- nucleating agent
WO2022230195	(SHBU) SHIBAURA MACHINE CO LTD	Apparatus for manufacturing stretched film such as optical film, has stretching unit which grips region of second thermoplastic resin at both ends of film formed of first thermoplastic resin and second thermoplastic resin cooled by cooling unit
WO2022225013	(TOXO) TOYO SEIKAN KAISHA LTD	Unstretched polyester film used for producing stretched polyester film for packaging bag, has polybutylene terephthalate layer made of at least polybutylene terephthalate
WO2022229798	(SYNC-N) SYNCRO SRL	Plastic film treating system, has reinforcing station with applicator devices associated with respective edge area of film and arranged to apply additional material on edge areas of film
WO2022210357	(NIRA) UNITIKA LTD	Semi-aromatic polyamide film used as laminate in materials, optical products, solar cell substrates, liquid crystal plates, conductive films, and display devices, has specific average coefficient of linear expansion in width direction
WO2022215407	(KONS) KONICA MINOLTA INC	Method for manufacturing polarizing plate protective film, involves stretching wound film in second stage with respect to winding width, and film is stretched so that amount of residual solvent immediately before second stage
DE102021203051	(LINR) LINDAUER DORNIER GMBH	Film stretching system for transverse stretching of plastic film, has openings through which fluid exits to form aligned fluid cushion in minimal gap, where plastic film is guided through inlet slot by fluid cushion without contacting casing layer



#### Curvado

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022238473	(ROCA) ROCKWOOL AS	Insulating pipe section manufacturing apparatus, has mandrel controlling element actively controlling transverse movement of rotatable longitudinal mandrel, where mandrel receives and winds uncured mineral wool around mandrel
WO2022229809	(ASPK) AISAPACK HOLDING SA	Method for manufacturing tubular body for packaging, involves cutting strip from each lateral edge of intermediate image to form final image, and shaping sheet as tubular body and edge-to-edge assembly to obtain continuity of design
JP7155325	(TOKG) SUMITOMO RIKO CO LTD	Manufacturing method of resin tube with connector, involves cooling straight pipe portion in state of being heated in heating holding process and in bent state

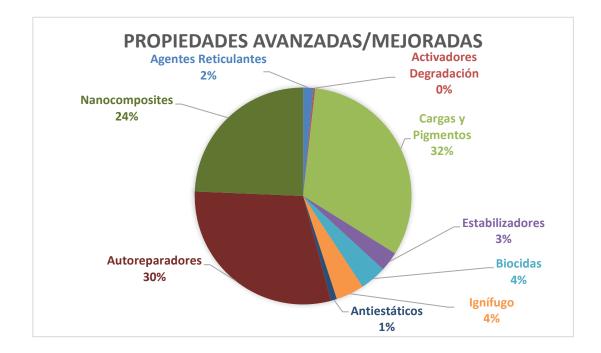




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## MATERIALES CON PROPIEDADES AVANZADAS O MEJORADAS

En el siguiente gráfico se muestra la distribución de las 785 familias de documentos de patente recuperadas en este trimestre en el apartado de Materiales con propiedades avanzadas o mejoradas. En este trimestre, el volumen de documentos de patente a cargas y pigmentos sobresale seguido muy de cerca por autorreparadores y nanocompuestos



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

### Cargas y Pigmentos

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20220160166	(TERR-N) TERRAHEIM CO LTD	Thermally conductive composition useful for thermal interface material comprises polymeric material I.E. silicone-based sealant, and an epoxy- based adhesive and filler mixture
WO2022249766	(BRID) BRIDGESTONE CORP	Rubber composition for forming tread rubber, comprises filler comprising silica, and rubber component comprising styrene-butadiene rubber modified using organosilicon compound, and unmodified styrene-butadiene rubber having glass transition temperature higher than that of styrene- butadiene rubber



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20220154623	(ELEM-N) ELEMENT CO LTD KB	Graphene-ceramic heat dissipation material with improved electrical insulation and resin miscibility comprises first dispersion solution is dispersed and second dispersion solution in which ceramic heat- dissipating filler is pulverized
WO2022244728	(MATU) PANASONIC INTELLECTUAL PROPERTY MANAGEME	Resin composition used for forming cured product for forming prepreg, comprises maleimide compound having benzene ring in molecule and hydrocarbon-based compound
KR20220136692	(AMOT ) AMOSENSE CO LTD	Heat dissipation antenna useful for wireless power transmission comprises antenna unit having rectangular cross-section and wound in predetermined shape on same plane, and polymer base disposed along one side of conductive wire
WO2022230600	(SHIE ) SHINETSU CHEM CO LTD	Curable organopolysiloxane composition for thermally conductive silicone grease composition, and semiconductor device, comprises organopolysiloxane, organohydrogenpolysiloxane, gallium and/or gallium alloys, thermally conductive filler, and platinum group metal catalyst, and alkyl organopolysiloxane
WO2022220188	(NIPA) NIPPON PAINT IND COATINGS CO LTD (YAWA ) NIPPON STEEL CORP	Organic solvent-based painting material used for curtain painting, and producing precoated metal sheet in home appliances for housings and building materials and for painting metal surfaces and as paint, comprises resin, surfactant, and organic solvent
WO2022215577	(MATU) PANASONIC INTELLECTUAL PROPERTY MANAGEME	Side-fill resin composition used for semiconductor device, comprises cationic polymerizable component containing oxetane compound and/or alicyclic epoxy compound, and photocationic polymerization initiator
WO2022210140	(YOKG) YOKOGAWA ELECTRIC CORP	Composition used as composite for manufacturing lignocellulose-derived material, comprises cellulose nanofiber having sulfate ester group and lignin-derived substance
WO2022210781	(SEKI ) SEKISUI CHEM CO LTD	New side chain type alkyl-modified silicone resin used in resin composite material used for electronic component such as semiconductor element and heat sink
WO2022202383	(LTEC) LINTEC CORP	Release sheet used as protective sheet for various adhesive bodies, such as adhesive sheets, process film for producing various resin sheets, and transfer sheet for producing electromagnetic wave shielding film, comprises base material and release layer formed on base material



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2022189577	(DATA-N) DATALASE LTD	Composition used for substrate and multi layer substrate construction such as E.G. packaging article, is formed of hot melt adhesive having colour-forming compound admixed therein, where colour-forming compound is chosen from leuco dye and oxyanion of multivalent metal or oxyacid or its hydrate
WO2022211652	(URAL-N) URALAVIASPETSTEKHNOLOGIYA CO LTD	Cold curing repair composition used for repair and hardening of various surfaces and structural elements, comprises epoxy resin, active thinner, plasticizer, dispersant, defoamer, aliphatic amine, aromatic amine mixture, and disperse filler

## Agentes Reticulantes

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4095194	(PREC-N) PRECIOUS MOUNTAIN ENT CORP (PREC-N) PRECIOUS MOUNTAIN ENTERPRISE CORP	Latex auxiliary composition for making latex solution, comprises sulfur-free crosslinking agent E.G. aluminum oxide, calcium chloride, and zirconium dioxide, and biomass filler E.G. sorbitol, polyacrylate, laurate and 1,2-glycerol diacetate
JP2022155433	(SEKI) SEKISUI CHEM CO LTD	Manufacturing crosslinked polyethylene pipe by plasticizing resin composition containing polyethylene resin, peroxide, and antioxidant, and crosslinking polyethylene-based resin comprising polyethylene resin having double bond at molecular end, and antioxidant comprises phenol- based antioxidant
JP2022153156	(FURU) FURUKAWA ELECTRIC CO LTD	Manufacture of silane-crosslinked resin molded article used for forming product, involves melt- mixing base resin comprising polyolefin resins, elastomer and mineral oil, organic peroxide, filler and silane coupling agent, molding composition and contacting with water
WO2022196430	(TOKT) THREE BOND CO LTD	Curable composition for forming coating on substrate, comprises polysiloxazan compound having preset weight average molecular weight and number average molecular weight, and silicone compound having hydrolyzable silyl group or hydroxyl group components containing structural units

#### Estabilizadores

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
FR3122880	(AQOR) BOSTIK SA	Crosslinkable two-component composition useful as adhesive, mastic and coating, preferably adhesive for assembling two substrates, comprises a first component containing methacrylate monomer, reducing agent, and zinc salt
US2022348747	(FABK) META PLATFORMS TECHNOLOGIES LLC	Polyethylene thin film into variety of different optic and electro-optic device architectures, comprises crystalline polymer and additive, where polyethylene thin film is characterized by Young's modulus
WO2022220018	(DAIK) DAIKIN IND LTD	Fluororubber cross-linking composition used for forming molded article, comprises polyol- crosslinkable fluororubber and cross-linking agent, which is hydroxy-containing compound, and its salt with alkali metal, alkaline earth metal and/or onium compounds

#### Biocidas

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
BR102021006543	(COTA-I) COTAIT R F	Usage of additive composed of copper nanoparticulates which are capable of attracting virus, breaking bilipid layer and inactivating viral action and eliminating virus which comes into contact within preset time, in nanotechnology of polymer, polyvinyl chloride, polystyrene and their other products
WO2022238830	(TERM-N) LA TERMOPLASTIC FBM SRL	Making antimicrobial handle used for cooking container for food and/or for relative lid, involves mixing powdered inorganic antimicrobial agent with powdered phenolic resin based compound to obtain antimicrobial blend, performing injection or compression molding of antimicrobial blend



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
FR3123360	(NEOL-N) NEOLIDO TECHNOLOGY SA	Flame-retardant composition used E.G. for surface protection of substrate, comprises polymer resin, sodium silicate, calcined kaolin, calcium carbonate, and water
JP2022161711	(AIKA) AICA KOGYO CO LTD	Flame-retardant resin composition used for processing applications of textile products for automobile interiors, comprises aromatic group- containing monomer in presence of surfactant having aromatic group, acrylic resin emulsion synthesized by polymerizing monomer, and flame retardant
WO2022220303	(MITU) MITSUBISHI CHEM CORP	Stampable sheet used as material for aircraft, ships, automobile parts, electrical and electronic equipment parts, building materials, and industrial parts, comprises thermoplastic resin, flame retardant, dispersant, and inorganic fiber
WO2022220304	(MITU) MITSUBISHI CHEM CORP	Battery housing used in electric motility, comprises fiber reinforced resin comprising high heat resistant fiber having specific melting or burning temperature in air atmosphere, and inorganic fiber having specific melting or burning temperature lower than high heat resistant fiber

## Antiestáticos

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
JP2022144695	(INOA) INOAC CORP KK	Polyurethane foam used for food container, and packaging material, comprises antistatic polyurethane foam obtained from composition in which polyol, foam stabilizer, blowing agent, and isocyanate are mixed, and composition comprises compounds having alkali metal salts or alkaline earth metal salts
JP2022136740	(CANO) CANON KK	Belt used in electrophotographic image-forming apparatus, comprises base layer comprising thermoplastic resin comprising polyphenyl sulfide and/or polyether ether ketone, organometallic salt having preset melting point, and conductive filler, and having endless shape



## Autorreparadores

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4089134	(CNRS) CENT NAT RECH SCI (USRB) UNIV SORBONNE	Producing polymer composition, comprises mixing a first non-self-healing thermoplastic polyurethane polymer with second self- healing polyurethane polymer at temperature sufficient to cause the microstructure of the polymers
US2020313111	(APPY) APPLE INC	Electronic device with flexible display cover layer for presenting images to user E.G. laptop computer, has display cover layer having transparent dielectric layer and layer of self-healing material that covers dielectric layer
EP4086301	(OULU-N) OULUN YLIOPISTO	Manufacturing self-healing elastomer by preparing boron trioxide, and hydroxyl- terminated polydimethylsiloxane, and polysiloxane precursors, reacting boron trioxide and hydroxyl-terminated polydimethylsiloxane mixing mixture with alcohol, and composition, and reacting mixture and composition
WO2022209922	(FUJF) FUJI FILM CORP	Curable composition used for forming hard coat film for image display device, comprises polymerizable compound comprising hydrogen-bonding groups and (meth)acrylic groups and having preset molecular weight and (meth)acrylic value

## Nanocomposites

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2022326611	(APMA) APPLIED MATERIALS INC	Method for forming optical devices using nanoimprint lithography and etch processes, involves etching first resist unit of first resist layer, and etching second hardmask unit of the hard mask corresponding to second resist unit
WO2022196588	(TOKQ) TOKYO OHKA KOGYO CO LTD	Photocurable composition used for photoimprint lithography for manufacturing process of semiconductor devices, comprises metal oxide nanoparticles, photopolymerizable compound and radical photopolymerization initiator



Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US11072147	(ALTU-N) ALTUM LLC	Composite structural component used for bearing load, comprises polymer core including surfaces, thermoplastic polymer skin, and crosslinking nanolayer including reactive component bonded to surface and thermoplastic functional component
WO2022251546	(IRRA-N) IRRADIANT TECHNOLOGIES INC	Three-dimensional nanofabrication platform system for use in E.G. microprocessor development, has latent patterning material selectively binding gel scaffold, and non-xanthene based chromophore selectively binding scaffold





# NOTICIAS

#### NUEVA DIRECTORA DE LA OEPM



El pasado 4 de octubre el Consejo de Ministros nombró a Aida Fernández González Directora de la Oficina Española de Patentes y Marcas, O.A. (OEPM).

La nueva directora es licenciada en Periodismo por la Facultad de Ciencias de la Información de la Universidad Complutense de Madrid y posteriormente realizó el Máster de Periodismo del Diario ABC, colaborando en este medio de comunicación

En el año 2010 ingresó en el Cuerpo Superior de Administradores Civiles del

Estado. En la Administración General del Estado ha prestado servicios como Jefa de Gabinete de la Subsecretaría del Ministerio de Economía y Empresa, Asesora Parlamentaria del Gabinete de la Vicepresidenta del Gobierno y Ministra de la Presidencia y del Ministro de Economía y Competitividad, así como Consejera Técnica del Gabinete de la Subsecretaría de Fomento. Desde el año 2018 ha sido Jefa de Gabinete de la Subsecretaria de Asuntos Económicos y Transformación Digital.

¡Le deseamos el mayor de los éxitos en esta nueva etapa!

Más información

# JORNADA DE ESTUDIO Y ACTUALIZACIÓN EN MATERIA DE PATENTES: "LUNES DE PATENTES"

El pasado 28 de noviembre tuvo lugar de forma presencial en la OEPM una sesión más de *Los lunes de Patentes*.

Desde el año 2001 la Oficina Española de Patentes y Marcas, O.A. (OEPM) y el Centro de Patentes de la Universidad de Barcelona (UB), organizan estas jornadas, dos de ellas en la OEPM y dos en la UB.

Se trata de un foro de aprendizaje y discusión en materia de patentes, cuyo objetivo fundamental es mantener al día a los profesionales de patentes de todos los ámbitos laborales (empresas, agencias de propiedad industrial, oficinas de patentes, bufetes, enseñanza), y de todas las especialidades (técnica, jurídica, gestión, etc...).





Los temas que se trataron a lo largo de la jornada fueron la actualización normativa, con la modificación de la Ley de Patentes, la prueba pericial técnica, y la atribución a lo mercantil de la competencia para

conocer de los recursos contra las resoluciones de la OEPM.

Esta jornada tiene carácter pro bono, siendo de tipo presencial y la asistencia gratuita.

La documentación está disponible en la página web del centro de patentes de la Universidad de Barcelona http://www.ub.edu/centredepatents/es/cursos/dilluns.html

Más información

#### CAMPAÑA PUBLICIDAD: LA VERDAD DE LAS FALSIFICACIONES

El Black Friday es una de las fechas significativas del mes de noviembre, por las numerosas compras que se realizan en todos los ámbitos. En la Oficina Española de Patentes y Marcas, O.A. (OEPM) somos conscientes de ello, y por eso año tras año, lanzamos en estos días una campaña para estimular la compra de productos originales.

La Ministra de Industria, Comercio y Turismo, Reyes Maroto presidió el acto de presentación de la campaña publicitaria junto con el Subsecretario y Presidente de la OEPM, Pablo Garde, y la Directora de la OEPM, Aida Fernández. Asistieron asimismo al acto de presentación representantes del sector público relacionados con la lucha frente fenómeno de al las falsificaciones, como las Fuerzas y Cuerpos de Seguridad del Estado, y representantes del sector



privado como asociaciones de consumidores, o de marcas, entre otros.

La campaña de este año, con el lema LA VERDAD DE LAS FALSIFICACIONES pretende informar y concienciar de que el consumo de estos productos falsificados hace que se cierren empleos, se ponga en riesgo la salud, o se contribuya a la contaminación global.

Esta campaña se ha querido humanizar utilizando la pareidolia, haciendo que los productos falsificados cobren vida y confiesen el daño que han infligido a las personas bajo un foco de luz similar al de un interrogatorio policial.

El formato visual que se ha utilizado es moderno y con colores vivos. Mediante esta creatividad se ha conseguido realizar una concienciación más profunda en el público objetivo.

Más información



#### XXI REUNIÓN ANUAL CENTROS REGIONALES DE INFORMACIÓN EN MATERIA DE PROPIEDAD INDUSTRIAL

Los días 7 y 8 de noviembre tuvo lugar en Valencia la XXI reunión anual de Centros Regionales de Información en materia de Propiedad Industrial (CCRR).

Esta reunión anual sirve de punto de encuentro entre la OEPM y los centros regionales, permitiendo que las relaciones entre todas las instituciones sean estrechas y fluidas.

La jornada coincidió con el V Congreso de Industria Conectada, y además de poder asistir al congreso, los participantes por parte de los CCRR tuvieron la oportunidad de asistir a ponencias y encuentros específicos para ellos.

Las sesiones, presentadas por personal de la OEPM, trataron sobre las novedades legislativas de patentes y diseños industriales y asimismo sobre la nulidad y la caducidad de las marcas, despertando estos temas gran interés entre los participantes.

La última parte estuvo dedicada a la casuística de cada uno de los centros, durante la cual se pudieron compartir experiencias y su proyección de futuro.

Esta reunión permitió estrechar los lazos existentes entre la OEPM y los Centros Regionales, así como reforzar las sinergias y ámbitos de colaboración entre las diferentes entidades.



