

NIPO: 116-19-020-3

En esta nueva andadura del Boletín de Vigilancia Tecnológica del Sector Transformador Plástico que comenzó el primer trimestre de 2021, la Oficina Española de Patentes y Marcas (OEPM) ha iniciado una nueva colaboración con AIMPLAS, Instituto Tecnológico del plástico que se encuadra dentro de una de las actividades de colaboración que la OEPM viene llevando a cabo con diferentes centros tecnológicos para hacer llegar a las empresas e investigadores que los integran, con periodicidad trimestral, una selección de las patentes más recientemente publicadas en el sector de transformación de los materiales plásticos.

AIMPLAS es un Centro Tecnológico con más de 30 años de experiencia en el sector del plástico que aporta soluciones a las empresas, en toda la cadena de valor, desde fabricantes de materia prima a transformadores y usuarios finales. A través de la I+D+i contribuye a resolver los retos que se plantea la sociedad en relación a los plásticos, para mejorar la calidad de vida de las personas y asegurar la sostenibilidad medioambiental.

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.

Como novedad de esta etapa, se reestructura el contenido del Boletín, intentando reflejar la realidad en propiedad industrial de la Industria del Plástico desde el punto de vista de nuevos productos en los principales sectores de aplicación, desarrollos que contribuyen al desarrollo sostenible, mejoras de procesos productivos y nuevos materiales plásticos con propiedades avanzadas. No se ha incluido en este Boletín información sobre la tecnología de impresión 3D, ya que esta 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 novedades extraídas del Observatorio del Plástico junto con noticias sobre 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 CIRCULARNUEVOS PROCESOS
INDUSTRIALESMATERIALES CON
PROPIEDADES AVANZADAS
O MEJORADAS

NUEVOS PRODUCTOS

En el siguiente gráfico se muestra la distribución de las 14.714 familias de documentos de patente recuperadas en este trimestre en el apartado de Nuevos Productos. Como se observa más de la mitad se refieren al campo de la electrónica.



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 |
|-------------------|----------------------------|---|
| US2021354875 | (REHR) REHRIG PACIFIC CORP | Collapsible container i.e. reusable plastic container, for shipping packages of frozen or refrigerated meat to stores, has first and second walls pivotably connected to pair of opposed edges of base |
| WO2021240521 | (VACO-N) VACOPAK IND LTD | Food packaging material used for forming container, comprises coating composition containing at least one antimicrobial active agent and hydrophilic polymer containing acrylate and coats at least one of outer surface and inner surface configured to face food product enclosed by packaging material |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| WO2021226722 | (UYLP) UNIV GUELPH | Gas barrier substrate useful for manufacturing article, comprises a biodegradable composite comprising a polymeric matrix and a sustainable filler comprising biocarbon |
| WO2021224579 | (CNRS) CNRS CENT NAT RECH SCI (UYMS) UNIV MAINE (FRRE-N) INST FR RECH EXPL MER (ONIR-N) ONIRIS NANTES ECOLE NAT VETERINAIRE AGROALIMENTAIRE & LALIME | Packing used for packaging food products, preferably seafood, comprises biopreservative surface comprising solid surface comprising strain of bioprotective bacteria E.G. Carnobacterium maltaromaticum, intended to be in contact with least one product to be preserved |
| WO2021207864 | (UYSA-N) UNIV SANTIAGO CHILE | Active antifungal container for bakery products such as celiac bread, comprises high-barrier co-extruded multilayer film comprising polymeric layers such as outer polymeric layer, intermediate polymeric layer and inner polymeric layer |
| WO2021203139 | (CSPT) MAXWELL CHASE TECHNOLOGIES LLC | Liquid-exuding product E.G. soap, containing package, has active member integrally formed onto interior surface of bottom of pouch, where active member is thermally bonded to interior surface |
| WO2021207113 | (CRYO-N) CRYOVAC LLC | Package for packaging fresh meat products, comprises food packages containing fresh meat food products, where the food packages are vacuum packaged to form case ready packages comprising support and permeable film |
| JP2021154579 | (MITU) J-FILM CORP | Coextruded film used for E.G., package for foodstuff comprises seal layer that contains non-cyclic polyolefin resin and antifog additive, and base layer that contains non-cyclic polyolefin resin and cyclic polyolefin resin |
| WO2021187198 | (ELED) DENKA CO LTD | Laminated sheet used in container, comprises base material layer and surface layer laminated on surface of base material layer comprising thermoplastic resin and inorganic filler, where surface layer comprises another thermoplastic resin and conductive material |
| KR20210154575 | (KIMH-I) KIMHYUNWOO | Easy-to-separate disposable plastic cup, has recycling mark that is displayed during compression so that mark on cylindrical cup is clearly seen three-dimensionally so that efficient classification is possible |
| US9956174 | (NORD-I) NORDAHL J | Cannabis juice puree package comprises frozen structures of Cannabis juice puree comprising non-decarboxylated cannabinoid, particularly cannabidiolic acid and tetrahydrocannabinolic acid, and decarboxylated cannabinoids |

Construcción Tejados

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|---|
| WO2021243236 | (BMAT) BUILDING MATERIALS INVESTMENT CORP | Article, E.G. roofing shingle, comprises polymer reinforced glass mat comprising glass mat and polymeric binder |
| WO2021236425 | (DARA-N) DARAMIC LLC | Microporous membrane for use in E.G. roofing, roofing underlayment, building wrap, building component, rain screen, flashing, flashing component, sound proofing material, insulation material, flooring, and flooring component |
| TWM607395 | (CHEN-I) CHEN C (HUAN-I) HUANG T | Environment-friendly composite roof tile structure, has roof tile with connecting portion whose two sides are integrally formed to extend arc-shaped portion, where arc-shaped portion and groove are formed by hot pressing to achieve good weather resistance |
| EP3910128 | (HELI-N) HELIOS TRADING NV | Slat for forming part of roof of covering E.G. pergola, has metal portion that is provided with coating layer onto which polymer film is bonded, and polymer film that is bonded to anodized and/or bichromatized metal portion |
| FR3109595 | (CODI-N) CODISTEEL SARL | Method for manufacturing an anti-condensation sheet used in roofing of buildings, involves giving shape to a sheet coated with textile film, while neutralizing the textile film by a spray unit for spraying a hydrophobic product |
| US2021332598 | (SPAD-N) SP ADVANCED ENG MATERIALS PVT LTD | Light weight composite deck panel for deck panelling structures, E.G. floors, walls, roofs, bridges, or bridge roadway decking, comprises two pre-defined shaped and sized foams that are encapsulated with multiple layers of synthetic glass fabric |
| US2021285216 | (LOUI-N) LOUISIANA PACIFIC CORP | Integrated roofing product for multi-layered engineered roofing structural panel E.G. oriented-strand board, for use as integrated structural sheathing on roof, has flashing extending from overlap end and over shiplap joint between upper and lower adjacent panels |
| KR102305712 | (DUON-N) DUON ENERGY 1 CO LTD | Heat-reflecting heat-shielding film useful in roof of a building comprises fiber layer of three-dimensional truss structure laminated on waterproof layer made up of water-dispersible resin containing urea-based resin and heat shield layer |
| CA3110363 | (SPEC-N) SPECIALTY GRANULES INVESTMENTS LLC | Coating of roofing granules in production of asphalt roofing shingle, involves applying coating comprising water, silicon-containing oligomer or polymer, and acrylic resin to roofing granules to obtain coated roofing granules having reduced staining, and applying granules to asphalt shingle |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|---|
| US2021253892 | (BMAT) BUILDING MATERIALS INVESTMENT CORP | Roofing formulation used in roofing system, comprises first portion that includes coating material that comprises one acrylic latex resin, that is selected from group consisting of hydrophobic resins, self-crosslinking resins |

Construcción Conducciones

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--------------------------------|---|
| KR102314756 | (JANG-I) JANG H S | Road liquid injection system for spraying water to road surface to automatically remove fine dust or harmful substances, has pump for transferring liquid containing water for clean road or salt water for road freezing prevention through pipe at set pressure |
| JP6975366 | (RISI-N) RISING SUN KK | Drain pipe for driving and discharging moisture in earth and sand, has cover pipe that is formed into conical shape and one end is formed in pyramid shape, and drain pipe is constituted of lid portion and receiving portion |
| KR102333516 | (BOOM-N) BOOM BOOM CO LTD | Reinforcing pipe pin for use in building, has chemical leak prevention element that is fixed in position by position fixing portion formed of non-screw portion or protrusion on outer circumferential surface of hollow pipe pin |
| WO2021220033 | (KIAS-N) KIASMA SRL | Pipe for transport of fluids under-pressure containing materials and abrasive ones comprises pipe body which includes outer wall made of thermoplastic material and inner wall made of thermoplastic elastomers and polyethylene |
| KR20210130572 | (TAEW-N) TAEWON CO LTD | Permeable ecological waterway pipe has fastening bolt that is inserted through upper end in width direction, and is passed through hinge hole of conduit tube main portion, and fastened by fastening nut |
| ES2853497 | (GASC-I) GARCIA GASCON J R | System for performing disinfection and cleaning by using of integrated clean bottom impellers in bottom of a swimming pool, comprises a branch of polyvinyl chloride pipes located along the bottom of the pool with the flat portion |
| JP2021134842 | (SEKI) SEKISUI CHEM IND CO LTD | Piping structure used as E.G. air conditioning pipes, comprises translucent joint including sockets and composed of resin composition containing vinyl chloride resin and flame retardant, and pipe inserted into sockets, where joint and pipe are fixed through adhesive containing fluorescent substance |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|-------------------------------|--|
| CA3117176 | (FARR-N) FARR BETTER PLUMBING | Pipe coupling for securing end portions of pair of thermoplastic pipe elements, has first connector and second connector that is complimentary to one other and connectable to each other when half-shells are in closed state to maintain half-shells in closed state |

Construcción Muros

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|--|
| WO2021242143 | (TERZ-I) TER-ZAKARIAN K A | Thermal insulating multilayer material used for seamless welding of connecting locks, contains layers of flat sheet of foamed polymer, in which the layers are interconnected by means of seams with formation of air spaces between joints |
| DE102020003377 | (KNAF) KNAUF GIPS KG | Thermal insulation composite system (ETICS) for installation on facade, has insulation layer that is made of combustible thermal insulation material, and layer of plaster is being continuous layer of plaster and thickness of greater than or equal to specific value |
| US2021339506 | (MYIN-N) MY INSPIRATION LLC | Method for providing insulation between interior of enclosure and outside of window, involves providing sheet of polymerized siloxane, placing sheet to cover pane of window of enclosure, and attaching placed sheet to window |
| WO2021240139 | (INNA-N) IND NATURE LTD | Product used in E.G. constructed article for insulation, comprises hemp fibers having preset length, and bonded together using biopolymer binder |
| US2021302130 | (GLIC-I) GLICK A B | Bullet resistant garage door for providing security of property and occupants behind garage door, has a panel of polymeric insulation that provided between interior and exterior ballistic panels |
| US2021301526 | (LEAH-I) LEAHY C H | Energy efficient insulated building panel, has polyurethane foam insulator that is configured to self-adhere to sheathing material and has flame spread value and smoke developed value, and reinforcing element includes a multiplicity of holes to receive the polyurethane foam insulator |
| KR102312564 | (HASG-I) HA S G (KIMH-I) KIMHAKSOO (LIMJ-I) LIM J S | Sound insulation structure for reducing floor impact sound of apartment house, has empty space that is formed between concrete slab and plastic corrugated sheet, where empty space is formed inside plastic sheet |

Construcción Ventanas

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| JP2021175991 | (UYAA) UNIV AKITA | Temperature-responsive heat shielding material useful in window glass, comprises gel comprising temperature-responsive polymer, crosslinking agent and electrolyte, where temperature-responsive polymer comprises cellulose derivative, and gel is utilized as heat shielding material |
| DE102020108599 | (SALN) SALAMANDER IND-PROD GMBH | Extrusion profile, such as a coextrusion profile, for a window and door section, comprises profile surface that is made from mixture, and mixture has plastic and pigmented cellulose or mineral substance, and mineral is magnesium silicate |
| US11148388 | (ANSH-I) ANSHU T | Semitransparent composite structure I.E. thermopaque glass, for use as transparent material in window into building, has adhesive resin for attaching intermediate plate to plate selected from group consisting of transparent disk structure |
| WO2021198529 | (EMPA-N) EMPA EIDGENOESSISCHE MATERIALPRUEFUNGS (EMPA-N) EMPA (HOCH-N) HOCHULI ADVANCED AG (HOCH-N) HOCHULI METALLBAU AG | Composite profile for use in E.G. window, has foamed core made of first plastic, and covering comprising core, which envelops core in form-fitting manner, where first and second plastics are compatible with each other |
| KR20210152096 | (WING-N) WIN GARAM CO LTD | Insulation block for windows and doors, has hollow insulation bar made of polyamide material, which is injection-molded by air cooling, where heat-insulating filler is molded into bar shape having volume smaller than internal volume |
| CA3116967 | (VINY-N) VINYL WINDOW DESIGNS | Sash apparatus for securing in window or door, has multiple segments that are arranged and coupled together at nonstraight angles to form frame such that internal passages are provided within segments in fluid communication with one another |

Automoción

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|----------------|--|
| WO2021233838 | (BADI) BASF SE | Metal-polymer laminate structure useful for molded part, and as active thermoshield for battery housings, has polymeric layer provided on a metallic layer and backing layer provided on the polymeric layer comprising intumescent material |

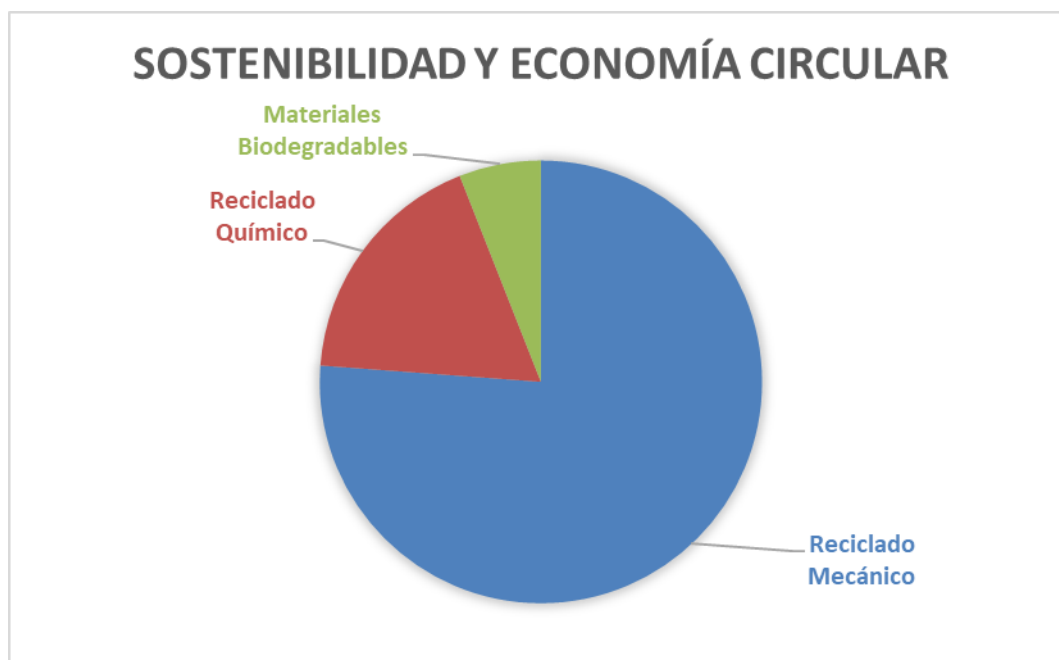
| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| US11167589 | (CHOS-N) CHOSEN CO LTD | Bicycle hub structure, has C-shaped buckle that pushes against beveled bearing and fastens with inner periphery of chamber |
| CN214492761 | (SUNW-I) SUN W | Plastic absorbing light weight automobile ceiling trim panel, has protective plate provided with clamping groove, where position of groove on protective plate corresponds to inner position of clamping block in groove |
| JP2021162080 | (TOYT) TOYOTA JIDOSHA KK | Fastening portion structure of vehicle body frame, has highly heat resistant carbon fiber reinforced plastic (CFRP) layer that is arranged between general heat-resistant CFRP layer and insert, and avoids insert and contacts with engine directly |
| US2021301068 | (INOA) INOAC CORP KK | Vehicle cushion pad used in vehicle seat cushion comprises polyurethane foam made of polyurethane foam composition having polyol, isocyanate, catalyst, foaming agent, additive having dicarboxylic acid ester and airflow of polyurethane foam |
| DE102020117338 | (NSUM) AUDI AG | Chassis E.G. wheel suspension for motor vehicle E.G. truck, has form-locking devices that engage in one another when moving support area relative to and along component to which support area is assigned, and which are designed as toothings |
| US2021323451 | (FAMF-I) FAM F K | Adjustable child restraint system, has controller operatively connected to base portion and/or child retaining portion, where retaining portion comprises expandable sections to operatively expand to support head and neck of child |
| CN113335219 | (NIOA-N) NIO AUTOMOBILE TECHNOLOGY ANHUI CO LTD | Airbag housing useful in airbag module, is prepared by using glass fiber reinforced polyamide 56 composite material |
| WO2021199380 | (YAWA) NIPPON STEEL CORP | Carbon-fiber-reinforced-plastic composite metal board for vehicle, in which mixed resin layer is located in any one of interface of interlayer of any of carbon-fiber-reinforced-plastic layer or carbon-fiber-reinforced-plastic layer, and metal plate |
| CN214266959 | (CHAN-N) CHANGZHOU XUPU AUTO PARTS CO LTD | Glass fiber reinforced polyurethane foam automobile interior trim part, has inner wall of first groove connected with end of spring, where inner part of first and second glass fiber reinforced foam plates is provided with arc plate |
| WO2021177274 | (MITU) MITSUBISHI CHEM CORP | Molded fiber used for sound absorbing/sound insulation materials, comprises extremely fine uncolored chemical fiber, colored fiber, and anti-hair |
| CN113715718 | (CAES) JIANGSU JIECHENG VEHICLE ELECTRONIC INFO | Carbon fiber special-shaped protective cabin body, has shutter whose side and side of composite end panel are fixedly connected by adhesive, and inclined vertical carbon fiber outer plate inner side connected with rods |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|------------------------------------|---|
| KR20210151299 | (CHAN-N) CHANG JO MACHINERY CO LTD | Lightweight seat frame is useful for the driver's seat of a car comprises composite material made of polypropylene resin and glass fiber mat reinforcement, and bends suitable for the driving seat of car and ribs |
| WO2021213894 | (SIKA) SIKA TECHNOLOGY AG | Sheet-like composite material for use in E.G. caravans, has sheet-like porous rigid material as base and elongated elements of fiber-reinforced plastic material with thickness less than that of laminar rigid material |
| KR20210110762 | (DAEH-N) DAEHAN SOLUTION CO LTD | Car floor carpet comprises a lightweight sound insulation sheet including fiber layer, low specific gravity sound insulation sheet containing rubber-based resin, inorganic filler, additives and foamed capsules, and foam layer |
| EP3885103 | (RICO-N) RICO SRL | Production process of wheels made of recyclable lightweight material, involves interfacing and fixing two free ends of bar when bar is completely rolled around cylindrical structure in such way to obtain wheel |

VOLVER A
CONTENIDO

SOSTENIBILIDAD Y ECONOMÍA CIRCULAR

En el siguiente gráfico se muestra la distribución de las 953 familias de documentos de patente recuperadas en este trimestre en el apartado de Sostenibilidad y economía circular. Como se observa la gran mayoría se refieren al reciclado mecánico.



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 |
|-------------------|-----------------------------|--|
| WO2021241712 | (MITU) MITSUBISHI CHEM CORP | Biodegradable resin composition used in film or sheet, comprises resin, protein and decomposition accelerator for biodegradable resin containing cellulose, hemicellulose and lignin, where resin comprises polyester resin comprising structural units E.G. succinic acid unit or azelaic acid unit |
| KR102330067 | (MAGI-N) MAGICOPPER INC | Composition useful in heat shrinkable tube comprises base resin I.E. ethylene-vinyl acetate copolymer and biodegradable resin, antiviral-antibacterial agent i.e. copper, zinc oxide and zeolite, and linear low-density polyethylene |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| KR102253513 | (IPPO-N) IP POOL INC | Producing biodegradable polymer composite used to produce E.G. plastic cups, comprises E.G. modifying inorganic material by mixing inorganic material with modifier and first additive, and biodegradable polymer in presence of second additive |
| WO2021226722 | (UYLP) UNIV GUELPH | Gas barrier substrate useful for manufacturing article, comprises a biodegradable composite comprising a polymeric matrix and a sustainable filler comprising biocarbon |
| PL433447 | (PONA) POLITECHNIKA POZNANSKA | Biocomposite used as laminate, comprises polymer matrix and fiber reinforcement, in which polymer matrix contains mixture of polylactide and poly butylene adipate-co-butylene terephthalate and is prepared by subjecting mixture to extrusion |
| TW202106188 | (CHIA-I) CHIANG K C | Dispabosglove disposable glove, has glove main body provided with biodegradable plastics and bio-based plastics, where part of glove main body is formed by biodegradable plastics and bio-based plastics |
| JP6966663 | (MIYO) MIYOSHI YUSHI KK | Biodegradable resin aqueous dispersion used for film-forming agent, comprises polycaprolactone having preset weight average molecular weight as biodegradable resin dispersed in aqueous medium in presence of nonionic dispersing agent |
| WO2021221598 | (HAVR-I) HAVRYLENKO M M | Ecological material used to manufacture products E.G. spectacle frame, eyeglass frames, dishes, floor tiles, walls, interior items and other household products, comprises coffee pomace and biopolymer |
| KR102325518 | (USKK) UNIV SUNGKYUNKWAN RES & BUSINESS FOUND | Solid electrolyte useful E.G. for manufacturing biodegradable transistor and biodegradable electronic device, comprises ionic liquid and biodegradable polymer bound by ester bond |
| KR102312863 | (GREE-N) GREEN CHEMTECH CO LTD | Wet type environmentally-friendly spontaneous ignition inhibitor comprises mixed alcohol of decyl alcohol and tridecyl alcohol, mixed alcohol of dodecyl alcohol and tridecyl alcohol, alkyl polyglycoside containing tridecyl alcohol |
| KR20210111188 | (CJCJ) CHEIL JEDANG CORP | Manufacture of biodegradable article E.G. packaging material, involves forming biodegradable coating layer on surface(s) of substrate by coating process selected from melt extrusion, solvent casting, wet coating and lamination process |
| EP3901219 | (KIMH-I) KIM H M | Structure useful for producing plastic products, is produced using curable composition comprising boiled meat slices, konjac, binder, and kelp, where structure has preset thickness |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| WO2021201708 | (NOVA-N) NOVADELTA-COMERCIO E IND CAFES SA | Composite substance for producing construction materials, comprises polymers, where composite substance having thermoplastic matrix that includes natural fibers of processing by-products of plant species |
| KR20210111186 | (CJCJ) CHEIL JEDANG CORP | Biodegradable resin composition useful for preparing biodegradable film, biodegradable pellet and biodegradable product including E.G. biodegradable bag comprises polyhydroxyalkanoate resin, and polybutylene adipate terephthalate resin |
| WO2021199839 | (UBEI) UBE MATERIALS IND LTD | Biodegradable resin composition useful in E.G. molded product as packaging materials for packaging various foods, chemicals, miscellaneous goods and liquids, agricultural materials, and building materials, comprises aliphatic polyester-based biodegradable resin and fibrous basic magnesium sulfate |
| WO2021188087 | (TRPL-N) TRPLAS OTOMOTIV PLASTIK LOJISTIK TURIZM SANAYI VE TICARET LT (TRPL-N) TRPLAS OTOMOTIV PLASTIK LOJISTIK TURIZM | Recyclable chemical mixture recipe used to produce glasses, cups, mugs, cutlery, forks, plates and similar kitchen products comprises polymers, colorants, filling materials E.G. coffee, coffee bean and/or coffee grounds, and additives |
| KR20210148523 | (DAEH-N) DAE HA MAN TECH CO LTD | Biodegradable capsule for chemical household products comprises biodegradable polymer selected from E.G., poly beta-hydroxybutyric acid which forms the capsule wall, and core material containing oil phase of perfume and/or oil |

Reciclado Mecánico

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---------------------------------------|---|
| KR102337261 | (KORA-N) KORASOL | Waste wire treatment method involves stabilizing coating material and metal by hot compression, when radioactivity measurement result for coating material exceeds reference value, and separating covering material from selected waste wire |
| WO2021230032 | (DNIN) DIC CORP | Peeling/removing ink film used for recycling plastic laminate to form recycled raw material, involves using ink cleaning agent containing nonionic surfactant and water for peeling and/or removing ink film from plastic substrate having ink film |
| TWM611960 | (CHAN-N) CHANGYI MACHINERY IND CO LTD | Pelletizing knife device for pelletizer, has compensating structure that is arranged on base and assembled with transmission component to selectively control movement of transmission component along axial direction |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| KR20210140833 | (BAEE-I) BAE E S | Waste tire treatment system has residue discharge chamber that is provided for separating and discharging residue from belt, when rubber of softened waste tire in waste tire pressure chamber is removed |
| WO2021231396 | (WOOD-N) WOODS HOLE OCEANOGRAPHIC INST | System for identification and classification of plastic types of sample, has processor that is configured to classify property of spectrum using classification model |
| DE102020113072 | (KRAU-N) KRAUSSMAFFEI EXTRUSION GMBH | Plastic processing plant for processing thermoplastic, plastic material, has metering and feeding device for metered or continuous feeding of plastic material pretreated in compactor device to first extruder |
| GB2594772 | (TAYL-N) TAYLOR PROTECTIVE COATINGS LTD | Thermal volumetric reduction apparatus for thermally compacting waste material, has cooling arrangement is arranged to direct cooling gas into communication with receiver for cooling MM, and third and fourth heated surface inclined |
| DE102020113252 | (SENS-N) SENSOR INSTR ENTWICKLUNGS & VERTRIEBS GM | Method for sorting multiple plastic objects, involves emitting IR light in direction of multiple plastic objects, and using detection for IR intensities, and taking detection by providing broadband IR detection unit |
| EP3909672 | (EURO-N) EUROLINE SRL | Machine for shredding portions of bituminous material in solid-state into granules in solid-state, has through-openings which are made on head of piston, which extend radially along direction approximately transversal to longitudinal axis |
| JP2021175602 | (TOAD) TOA KENSETSU KOGYO KK (NAMA-N) NAT MARITIME PORT & AVIATION TECHN | Collection method of plastics piece, involves separating and collecting plastics pieces from portion for fine granule deposition, and filtering portion of fine granular deposition |
| US2021323198 | (AMOS-I) AMOS W (LUPI-I) LUPISAN A (TOSS-I) TO S | Recycling post-consumer plastic waste into fused filament fabrication monofilament for additive manufacturing end users, comprises E.G. sorting and granulating raw plastic waste, and filtering non-ferrous and ferrous metals from flake material |
| WO2021199090 | (PALP-N) PAL SRL | Recycling used disposable containers of foodstuffs for instant beverages, E.G. coffee capsules, by crushing mass of disposable containers with crushing unit, and separately collecting non-ferrous conductive components and plastic components |
| WO2021191296 | (GENE) LM WIND POWER AS | Method for preparing wind turbine blade for recycling, involves mechanical crushing and/or grinding second blade portion separate from first blade portion to obtain second granulates separated from first granulates |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|---|
| KR102304913 | (HONG-N) HONGIK ENVIRONMENT & IND | High-purity iron core separation device for waste tire, has input conveyor mounted on side of raw material input hopper unit, iron core separator for allowing iron core and rubber crushed material to move, and discharge conveyor for transporting iron core |
| JP2021143279 | (WUCW-I) WU C W | Recovery and regeneration of waste fishing net into recycled plastic, involves providing raw materials for fishing nets by performing pretreatment steps of shredding, removing impurities, washing, drying, and sieving melted mixed raw material through different sieves with different number of meshes |
| BR102020002498 | (RADI-N) RADIANTE ENGENHARIA TELECOM LTDA | Machine for recycling of optical cable scrap, comprises rectangular prismatic bench with structural profiles having hole for fixing shaft, oblong hole for adjusting shaft, two holes for adjusting knives, and holes for fixing assemblies |
| WO2021245352 | (PLYM-N) SOC PLYMOUTH FR | Recycling polymer foam, comprises rolling polymer foam in presence of polymeric binder to obtain homogeneous mixture of laminated polymer foam and binder, recovering homogenous mixture in form of strips, and fractionating strips |

Reciclado Químico

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| US2021324136 | (CJCJ) CJ CHEILJEDANG CORP | Low-temperature processible aliphatic polyester, for preparing article, E.G. biodegradable wax, medical device, or bioplastic, comprises 3-hydroxybutyrate monomers and 4-hydroxybutyrate monomers as polyhydroxyalkanoate copolymer molecules |
| DE102020207121 | (CONW) CONTINENTAL REIFEN DEUT GMBH | Method for devulcanizing vulcanized rubber compound of pneumatic tire of vehicle, involves extruding vulcanized rubber particles in twin-screw extruder, so that devulcanized rubber mixture is produced, with regeneration reagent added to extruded rubber particles during extrusion |
| US2021322894 | PROCTER & GAMBLE [US] | Reducing surface and bulk contamination in plastic |
| US2021340351 | (UNIW) UNIV WASHINGTON STATE (UYWO) UNIV WYOMING | Recycling polyethylene terephthalate involves E.G. pre-loading reactor with ratio of polyethylene terephthalate and deionized water, injecting carbon dioxide to reactor at injection pressure and heating ratio of terephthalate and the water |
| US2021261749 | (ALLU) ALLIANCE SUSTAINABLE ENERGY LLC | Composition used to make heat transfer fluids comprises lignin-derived mixture comprising dimer, trimer or tetramer |

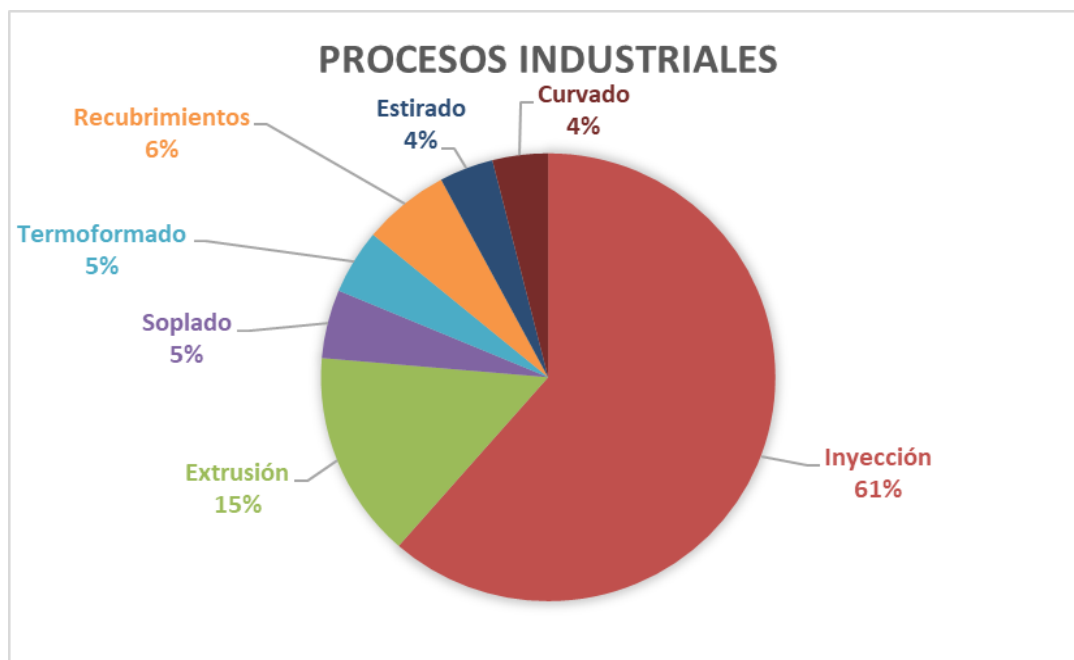
| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|--|
| WO2021230312 | (DNIN) DIC CORP | Recycling of waste polystyrene products from packaging container E.G. bottle, involves carrying out pyrolytic-processing of waste polystyrene to obtain recycled styrene monomer |
| AU2021202632 | (MURP-I) MURPHY S | Pyrolysis arrangement for pyrolyzing plastic waste, comprises input for receiving plastic material, heated reactor operatively fed with plastic material, catalyst chamber arranged in fluid communication with an output of the reactor |
| WO2021225788 | (GASE) GAS TECHNOLOGY INST | Converting thermoplastic oxygenated polymers to hydrocarbons involves catalytic hydrodeoxygenation in a pressurized hydrogen environment |
| WO2021211505 | (EACH) EASTMAN CHEM CO | Recycling a plastic waste by depolymerizing portion of polyethylene terephthalate-containing reclaimers colored plastic-containing mixture and/or municipal recycling facility colored plastic-containing mixture in chemical recycling facility |
| WO2021203207 | (TYRO-N) TYROMER INC | Odor abatement in industrial applications by applying fabric softener comprising anti-tack agent and bleach, to rubber product, involving applying fabric softener to extrudate and passing rubber product through dip tank |
| WO2021200959 | (MAZN) COSMO OIL CO LTD | Resin dissolving method used for producing petrochemical feedstock for manufacturing petroleum product, is method in which specific resin is not dissolved but resins other than specific resin are dissolved from mixture containing resins, where mixture is brought into contact with solvent to dissolve |
| WO2021211523 | (EACH) EASTMAN CHEM CO | Processing E.G., pyrolysis recycle content ethylene composition, and partial oxidation (POX) gasification recycle content ethylene composition involves feeding the ethylenes to reactor in which polyethylene is made |
| WO2021211515 | (EACH) EASTMAN CHEM CO | Recycling plastic waste, involves passing polyethylene terephthalate-containing solidified purge material to chemical recycling facility and depolymerizing purge material in chemical recycling facility |
| JP2021155478 | (TOAU) TOYO ALUMINIUM KK (UYKW) UNIV KANAGAWA | Decomposing fluorine-containing polymer by contacting fluorine-containing polymer with subcritical water in the presence of basic compound selected from alkaline-earth metal hydroxide and/or alkali metal hydroxide |
| FR3108909 | (AQOR) ARKEMA FRANCE | Recycling of polyacetal used for forming polyoxymethylenedialkylether product for synthesizing (meth)acrylic acid or ester or (meth)acrolein or neopentyl glycol, involves reacting acid catalyst with mixture comprising polyacetal, reactive polyoxymethylenedialkylether and optionally solvent |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| WO2021199895 | (MITU) MITSUBISHI CHEM CORP | Recovery of polyester film used for recycled polyester product, involves removing functional layer of laminated polyester film containing functional layer on surface by cleaning using cleaning agent comprising compound comprising alkalizing agent and hydroxyl group(s) to recover polyester film |
| WO2021191503 | (VALW) VALTION TEKNILLINEN TUTKIMUSKESKUS | Depolymerizing polylactic acid by mixing polylactic acid pellets in volatile solvent to form homogeneous or clear solution, adding trifluoroacetic acid, formic acid or acetic acid, incubating, evaporating solvent and acid, and recovering partially depolymerized polylactic acid |
| WO2021181533 | (HITM) MAXELL HOLDINGS LTD | Apparatus used for decomposing biodegradable resin, consists of reactor in which resin and additive are introduced, screw for kneading contents of reactor, heater for heating reactor, viscometer for measuring viscosity of decomposed product, and controller for controlling screw and/or heater |
| WO2021242636 | (ESSO) EXXONMOBIL CHEM PATENTS INC | Production of cyclic olefin involves introducing polymer to metathesis catalyst in reaction vessel under reaction conditions to obtain product comprising cyclic olefin |
| WO2021251962 | (HEWP) HEWLETT-PACKARD DEV CO LP | Recovering polymer from a three-dimensional printed object by dissolving polyamide polymer of a three-dimensional printed object in a polyamide-dissolving solvent, separating particulate fusing compound, and evaporating solvent |

VOLVER A
CONTENIDO

NUEVOS PROCESOS INDUSTRIALES

En el siguiente gráfico se muestra la distribución de las 7.758 familias de documentos de patente recuperadas en este trimestre en el apartado de Nuevos procesos industriales. Como se observa más de la mitad de ellos se refieren a la impresión 3D.



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 |
|-------------------|-----------------------------|---|
| WO2021235295 | (MFVM-N) MFV CO LTD | Insert-molded container, has molten material that is injected toward surface protective material, secondary container that is formed by arranging surface protective material in position opposed to gate for injecting molten material |
| WO2021244739 | (ZUEN-N) ZUENDEL KUNST GMBH | Drive system for mold plate of multi-component injection molding tool, has receptacle that is alternately and/or successively pressurized with pressure medium via hydraulic line leading into receptacle |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| WO2021240977 | (CANO) CANON KK | Polygon mirror for use in optical deflector, optical scanning device and image forming device |
| JP2021172029 | (JTEK) JTEKT CORP | Molding system has abnormal estimation unit that obtains prediction information for estimating abrasion state of gate based on first evaluation value |
| WO2021230370 | (FUJF) FUJI FILM CORP | Curable resin composition for forming film, comprises (meth)acrylic resin containing (meth)acryloyl group or vinyl ether group and having preset number average molecular weight, and monomer including (meth)acryloyl group or vinyl ether group and having molecular weight, and polymerization initiator |
| WO2021231074 | (RIPR) RICH PROD CORP | Injection-molded aerator mixing rod for use in food product dispensers, has first passageway that is misaligned with second passageways in direction parallel to longitudinal axis such that passageways are configured to form tortuous path |
| DE102020111510 | (KRAU) KRAUSSMAFFEI TECHNOLOGIES GMBH | Plasticizing unit for plastic processing machine e.g. for injection molding machine or extrusion system, has one or more wave crests with surface designed as plateau and forms wave crest shear surface being provided in wave screw flight |
| US2021327210 | (ANPL) ANGEL GROUP CO LTD (ANPL) ANGEL PLAYING CARDS CO LTD | Gaming chip for incorporating sticker-type radio frequency identification (RFID) tag, has body injection-molded to enclose enclosing unit enclosing tag, and decal unit for representing type or denomination of gaming chip |
| WO2021221022 | (NASB) NISSEI ASB MACHINE CO LTD | Method for controlling mold opening and closing device, involves changing speed change in deceleration region for decelerating movement of hydraulic cylinder and reducing change width of speed per time in latter half portion |
| WO2021215222 | (JTEK) JTEKT CORP | Molding system for estimating burning of molded product, has abnormal estimation unit that is provided for obtaining prediction information for estimating burning of molded product based on injection time |
| WO2021210520 | (FUFA) FANUC CORP | Injection molding machine has clamping mechanism for moving fixed platen to retain fixed die toward fixed platen, elongation value detection unit for detecting elongation of tie bar that extends as clamping force is generated, and abnormality determination unit for determining abnormality in machine |
| WO2021199842 | (TORA) TORAY IND INC | Polyester resin composition used for forming molded product for manufacturing composite molded product, has preset crystallinity obtained through high-speed crystallization by using high-speed calorimetry |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|--|
| DE102020109203 | (STGS-N) STG STANZTECH GMBH & CO KG (STGS-N) STG STANZTECHNIK GMBH & CO KG | Injection molding system for producing molded parts from injectable molding compounds, has tool gripping device that is designed to grip and lock molding tool and to feed and remove molding tool from injection molding device |
| WO2021201182 | (SUMH) SUMITOMO HEAVY IND LTD | Base frame for injection molding machine, has platen attachment plate whose shape is lengthened and length of longitudinal direction at outer-end is set greater than inner portion in width direction |
| EP3888874 | (SUMH) SUMITOMO HEAVY IND LTD | Injection molding machine for use in injection molding system, has condition setting unit for setting setting condition of position of movable unit based on position setting information |
| EP3888876 | (SUMH) SUMITOMO HEAVY IND LTD | Injection molding machine has display unit that displays editing screen on which several separately displayable components are collected |
| EP3882000 | (SUMH) SUMITOMO HEAVY IND LTD | Injection molding machine, has data collection unit for collecting data related to machine matching content of event according to occurrence of event for each of set of events, which occur in machine |
| FR3111353 | (AQOR) ARKEMA FRANCE | Molding composition for manufacturing article by injection molding, preferably electronics for sport, automobile or industrial products comprises at least one semi-crystalline aliphatic polyamide, carbon fibers, and hollow glass beads |

Extrusión

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|--|
| WO2021237376 | (JIAN-N) JIANGSU XINXIANG MECHANICAL & ELECTRICAL CO LTD | Direct long fiber reinforced thermoplastic in-mold coating used in building templates comprises E.G. adding polypropylene and glass fiber into extrusion equipment, introducing mirror sheet into oven for heating, and installing mold in frame |
| EP3915778 | (GIES) GIESECKE & DEVRIENT MOBILE SECURITY GMBH | Multi-layer coextruded film comprises front side and rear side, and three layers including first layer, second layer containing laser additive and second layer containing fluorescent additive and having area impermeable to UV radiation |
| WO2021220134 | (NVCH) NOVA CHEM INT SA | Extrusion of composition, E.G. blown film, comprises applying polyethylene glycol to annular die prior to addition of composition to extruder |
| DE102020111510 | (KRAU) KRAUSSMAFFEI TECHNOLOGIES GMBH | Plasticizing unit for plastic processing machine E.G. for injection molding machine or extrusion system, has one or more wave crests with surface designed as plateau and forms wave crest shear surface being provided in wave screw flight |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---------------------------------|--|
| ES2852702 | (MART-I) TORREGROSA MARTINEZ J | Procedure for manufacturing plastic film used in packaging, involves forming film bubble in which plastic mass is extruded by die head, and forms flat tubular film using rollers, and diameter of the bubble is modifiable through caliper |
| WO2021207522 | (AIRT-N) AIRTECH INT INC | Extrusion system comprises extruder screw housed in barrel, nozzle heater coupled to barrel, printing nozzle coupled to nozzle heater, and randomizing element configured to randomize orientation of fiber elements and/or fillers |
| WO2021200627 | (ASAG) AGC INC | Extruded film used for laminate, as cover material for antenna, flexible device such as transparent flexible printed circuit board, antenna part, printed circuit board, sports equipment, food industry products, wearable device and medical device, comprises tetrafluoroethylene polymer |
| DE102020108599 | (SALN) SALAMANDER IND-PROD GMBH | Extrusion profile, such as a coextrusion profile, for a window and door section, comprises profile surface that is made from mixture, and mixture has plastic and pigmented cellulose or mineral substance, and mineral is magnesium silicate |
| ES2848624 | (UYAL-N) UNIV ALCALA | Device for detecting manufacturing defects in extrusion profile production lines, includes a base semi-fixed and adjustable in height, a box connected to the semi-fixed base and adjustable in height with respect to it, and a lighting module |
| EP3888879 | (UYGI-N) UNIV GIRONA | Extrusion head for continuous fused filament fabrication, has shape-morphing channel for reshaping continuous filament flowing in melted form from inlet to outlet of reshaping inner channel of extrusion head |

Soplado

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|------------------------------------|--|
| DE102020113013 | (TILL-I) TILL V | Blow mold for production of plastic bottles by stretch blow molding, has belly length of cavity is adjustable in longitudinal direction between neck section of cavity for forming bottle neck and mold base, so that blow mold is designed for producing plastic bottles with different volumes |
| WO2021222016 | (ESSO) EXXONMOBIL CHEM PATENTS INC | Film useful in blow molded articles, bags, injection molded articles, extrusion coating articles and foamed articles, comprises a polyethylene composition comprising ethylene and olefin comonomer |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| WO2021215413 | (MITO) MITSUBISHI HEAVY IND MACHINERY SYSTEMS | Preform for blow-molding and producing plastic bottle, for use with sterilizer, has inclination portion that is gradually small at gradient with constant second internal diameter and formed so that preset inclination-angle is formed between internal peripheral surface with respect to axis line |
| WO2021207563 | (PROC) PROCTER & GAMBLE CO | Blow molded multilayer article useful as bottle, comprises hollow body defined by wall comprising inner surface and outer surface, where wall is formed in region by layers comprising skin layers comprising thermoplastic material, and core sandwiched between skin layers |
| WO2021209790 | (TIAU-N) TI AUTOMOTIVE TIANJIN CO LTD | Method for clamping internal component inside tank, involves applying main blow molding pressure within parison while parison is clamped to ends of internal component, and operating movable arms to release internal component |
| US2021283818 | (FROH-N) FROHN GMBH & CO KG W | Method for manufacturing blow-molded plastic container, involves inserting blow mandrel assembly from above into inlet opening of preform, closing blow mold halves, and inflating preform in blow mold to form container |
| WO2021188256 | (ESSO) EXXONMOBIL CHEM PATENTS INC | Process for making extrusion blow molded articles that are useful for packaging consumer products, involves producing polyethylene copolymer by using a polyurethane-based process |
| WO2021192612 | (YOSK) YOSHINO KOGYOSHO CO LTD (YOSK) YOSHINO KOGYOSHO KK | Liquid blow molding apparatus for supplying pressurized liquid to preform and subjecting liquid to liquid blow molding to container, has blow nozzles that are connected to corresponding blow molding outflow ports through pipe |

Recubrimientos

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--------------------------------------|--|
| EP3912799 | (ADHE-N) ADHETEC | Device for affixing marking sets on surface, has marking assembly sandwiched between free portion of support portion and protection portion so that face of assembly marking is intended to be applied to area to be marked |
| WO2021224832 | (IMPE-N) IMPETUS PORTUGAL-TEXTEIS SA | Absorbent garment structure for use in article of reusable underwear for absorbing bodily fluids, comprises set of four superimposed layers, comprising first layer, second layer, third layer of cellulosic fibers, fourth layer and tape |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| JP2021172065 | (KPPL-N) KP PLATEC CO LTD (KPPU-N) KP PURATECH KK | Manufacturing method of lamination pulp container used for accommodation of foodstuff, involves molding laminate film corresponding to other side of container main portion, and affixing film after molding after adsorption sticking process |
| WO2021201366 | (KOSP-N) KOSPA CORP | Method for manufacturing an eco-friendly buoy, involves providing an internal structure and the upper surface and the lower surface of the inner structure are attached to the upper surface and the lower surface respectively |
| EP3885511 | (SURF-N) SURFACE TECHNOLOGIES GMBH & CO KG | Method for producing panel with sealed panel edge, involves forming bevel between panel edge of pair of opposing panel edges and panel top, and sealing panel edge |

Estirado

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|---|
| WO2021220717 | (FUJF) FUJI FILM CORP | Manufacturing method of uniaxial-stretching polyester film, involves cooling polyester film in which uniaxial stretching is carried out, which contacts cooling roll with specific value of arithmetic mean roughness |
| WO2021215174 | (SHBU) SHIBAURA MACHINE CO LTD | Stretching apparatus for gripping sheet-like article, has controller that is configured to control operation of drive mechanism and adjustment mechanism, and control rotations of outlet-side sprockets in accordance with load acting on rail devices from clip units |
| WO2021200754 | (NPEC) NIPPON ESTER CO LTD (NIRA) UNITIKA LTD (NIRA) UNITIKA TRADING CO LTD | Biaxially stretched polyester resin-based film used for packaging material, which has excellent bending resistance |
| WO2021193508 | (TOYM) TOYOBO KK | Biaxially oriented polypropylene film useful for packaging bag satisfies specified heat shrinkage rate |
| US2021263205 | (FABK) FACEBOOK TECHNOLOGIES LLC | Polymer thin film comprises first in-plane refractive index (NX) along first direction of polymer thin film, second in-plane refractive index (NY) along second direction of polymer thin film orthogonal to first direction |

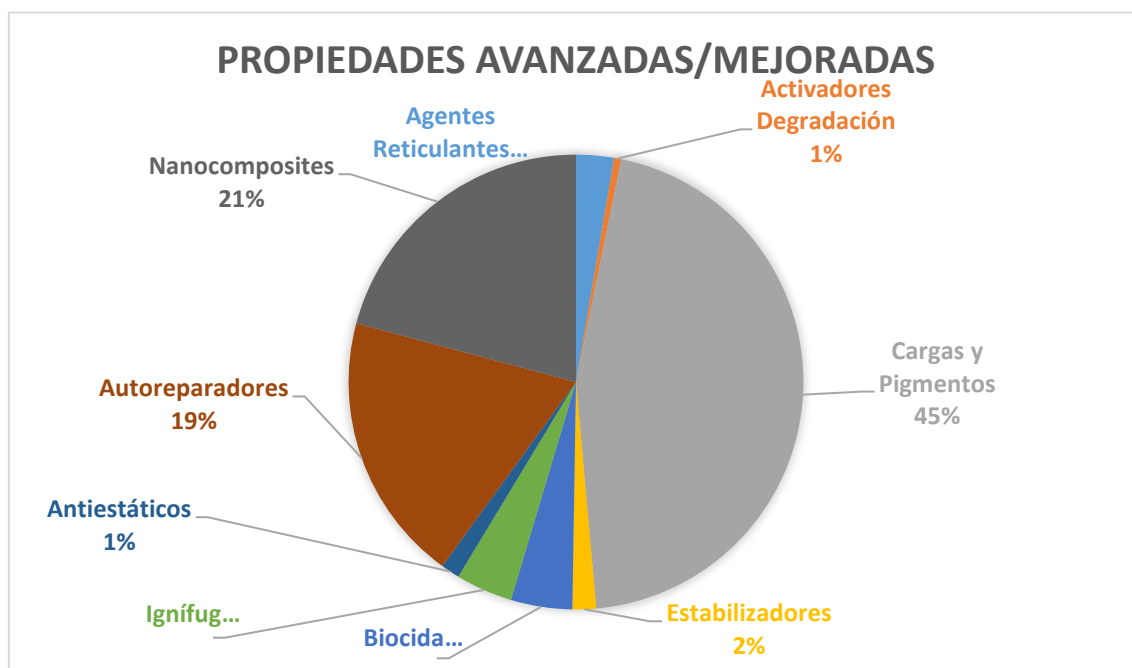
Curvado

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--------------------------------|---|
| WO2021229058 | (ECOS-N) ECOSAVE PACKAGING APS | Lig for manufacturing E.G. paper drinking cup, has sliding mechanism arranged such that jaws of set of split jaws displace along path having angle to longitudinal center axis of open recess of container fixture |
| EP3884888 | (COVI) COVIDIEN LP | Fixation device for folding seal for surgical access device, has nest assembly secured to horizontal portion of frame, and support assembly supported on folding assembly, where support assembly includes support plate and seal clamp |
| EP3885103 | (RICO-N) RICO SRL | Production process of wheels made of recyclable lightweight material, involves interfacing and fixing two free ends of bar when bar is completely rolled around cylindrical structure in such way to obtain wheel |
| WO2021255380 | (SFRA) SAFRAN AIRCRAFT ENGINES | Method of manufacturing casing made of composite material for aircraft turbomachine, involves mounting removable stopper on drum and abutment of edge against stop |

VOLVER A
CONTENIDO

MATERIALES CON PROPIEDADES AVANZADAS O MEJORADAS

En el siguiente gráfico se muestra la distribución de las 595 familias de documentos de patente recuperadas en este trimestre en el apartado de Materiales con propiedades avanzadas o mejoradas. Como se observa el grupo más numeroso es el de Cargas y Pigmentos.



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 |
|-------------------|---|--|
| WO2021212247 | (ROUG-I) ACUNA ROUGIER C L (EAGL-I) CIFUENTES EAGLEHURST C C D L | Obtaining aqueous paint involves using expanded polystyrene or extruded polystyrene waste as raw material, cleaning expanded polystyrene or its waste with surfactant to remove organic matter, and rinsing and removing all surfactants |
| JP2021143323 | (ELED) DENKA CO LTD | Refractory material useful in molded product including joint materials for flame-resistant double-layer pipes, comprises rubber component, thermally expansible graphite and inorganic filler |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| KR20210124636 | (DAWO-N) DAWOOMTECH CO LTD | Fragrance coating of plastic molded product e.g. thermoplastic resin bead for artificial pearl, involves mixing fragrance with nucleic acid or alcohol, injecting fragrance into finely divided particles, and spraying mixture of coating agent and organic solvent on outer peripheral surface |
| JP2021165375 | (CANO) CANON KK | Photocurable resin composition for three-dimensional molding used for manufacturing three-dimensional object comprises resin component containing (meth)acrylate compound, inorganic particle, and radical photopolymerization initiator |
| JP2021163962 | (TIYO) TAIYO INK MFG CO LTD | Electrically conductive paste used for forming a pattern wiring on fabric with a transfer method comprises binder resin, thermosetting component, and electrically conductive filler |
| KR20210121884 | (TEEM) EM TECH CO LTD (JAEW-N) JAEWON IND CO LTD | Preparing UV-curable polyurethane ionomer-solid electrolyte useful for lithium secondary battery comprises adding cellulose polymer and sulfonated polystyrene-divinyl benzene powder to polyurethane ionomer mixture |
| WO2021199861 | (FUJF) FUJI FILM CORP | Mixture used for manufacturing cured material for paving road surface, comprises asphalt, aggregate, at least one comprising aliphatic carboxylic acid and aliphatic carboxylic acid ester, alkaline compound, and at least one comprising water-soluble solid material and hydrophilic solid material |
| KR102340400 | (UYKR) UNIV KOREA RES & BUSINESS FOUND | Colored radiant cooling element comprises color-realization layer which reflects near-infrared rays of incident sunlight and absorbs specific visible rays of incident sunlight to implement at least one color, wavelength-conversion absorption light-emitting layer, and radiation cooling layer |
| WO2021241249 | (SONY) DEXERIALS CORP | Thermally conductive sheet used in heat radiating structure for electronic device, comprises hardened material of resin composition containing carbon fibers, inorganic filler other than carbon fibers and binder resin |
| WO2021230822 | (UFZU) UNIV FUZHOU (UNUS) UNIV SINGAPORE NAT | X-ray detecting film for X-ray imaging object has persistent luminescent nanoparticles which are lanthanide-doped nanoparticles E.G., terbium-doped sodium yttrium tetrafluoride nanoparticles, dispersed within flexible polymer matrix |
| KR20210120224 | (SUMO) DONGWOO FINE-CHEM CO LTD | Colored photosensitive resin composition useful to produce color filter for display device and pixels, comprises colorant including dye and pigment comprising nitrogen containing polycyclic compound and alkali-soluble resin |
| WO2021185693 | (MERE) MERCK PATENT GMBH | Use of colored effect pigment for enhancing infrared absorption capacity of colored polymers, where colored effect pigment comprise layer comprising carbon |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|-------------------------------|---|
| JP2021143229 | (TOPP) TOPPAN PRINTING CO LTD | Decorative sheet used for surface decoration of interiors and exteriors of E.G. buildings, comprises base material layer containing inorganic pigment and polyolefin resin, and triazine-based UV absorber containing hydroxyphenyltriazine-based UV absorber and has preset average absorbance value |

Agentes Reticulantes

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| JP2021155509 | (TOKG) SUMITOMO RIKO CO LTD (UNOK) UNIV NAGAOKA TECHNOLOGY NAT UNIV CORP | Rubber molded body used as rubber products, is obtained by crosslinking rubber composition having rubber polymer, zinc oxide, vulcanization accelerator, and sulfur-based vulcanizing agent |
| WO2021193811 | (SUME) AUTONETWORKS TECHNOLOGIES LTD (SUDE) SUMITOMO DENSO KK (SUME) SUMITOMO ELECTRIC IND LTD (SUME) SUMITOMO WIRING SYSTEMS LTD (UKUY) UNIV KYUSHU NAT CORP (KYHU) UNIV KYUSHU | Metal crosslinkable polymer composition useful for metal crosslinked polymer material for wire harness, comprises component, in which metal ions are liberated by heat, and other component comprising organic polymer having substituent that forms ionic bond with liberated metal ions |

Estabilizadores

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|--|
| KR102329172 | (LEED-I) LEE D W (YUNL-I) YUN L S | Viscoelastic damping composition for reducing noise and vibration between floors of apartment house, is obtained by mixing molten main oil, elastic rubber, binder, antioxidant, coagulant, reinforcing material, and filler |
| KR102305029 | (BYCH-N) BY CHEM CO LTD (GOMS-N) GOMS CO LTD | Composition for forming antibacterial and heat-blocking window film, comprises dipentaerythritol hexaacrylate, N,N-dimethyl acrylamide, 1-hydroxycyclohexyl phenylketone, butyl 2-propenoate, liquid thermal barrier and antibacterial agent |

Biocidas

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|---|
| WO2021250092 | (DANT-I) DANTZIGUIAN K A (KASP-I) KASPARIAN A H | Antibacterial or antiviral multilayers material used to cover trolley handle, and door handle, comprises tie binding layer with adhesive face, and active treatment layer comprising anti-bacterial and/or anti-viral agents |
| JP2021181227 | (NIPQ) DAINIPPON PRINTING CO LTD | Antiviral article E.G. building interior material, vehicle interior material and touch panel, comprises cured product layer comprising curable resin composition, antiviral agent supporting or containing silver ions on carrier and light stabilizer comprising hindered amine compound |
| WO2021230400 | (RFCH-N) R & F CHEM LTD | Antibacterial mask comprises mask component comprising coupling holes, outer layer and inner layer made of base resin-containing antibacterial composition, nonwoven inner shell portion comprising polyethylene or polypropylene, and ear loops |
| KR102314835 | (UBAU-N) UBAUTO CO LTD | Antibacterial handle cover for automobiles comprises antibacterial component including silicon dioxide, aluminum oxide, silver, zinc and sodium, and base layer bonded with antibacterial layer including carrier |
| KR102309939 | (WECA-N) WE CAN G CO LTD | Manufacturing eco-friendly high antibacterial low pressure melamine laminate sheet involves impregnating base paper with impregnation solution, and then impregnating impregnated base paper into another impregnating liquid |

Ignífugos

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|--|
| WO2021235964 | (SMAR-N) SMARTFIREBLOCK DOO BEOGRAD CUKARICA | Producing flexible expandable fire-resistant materials used as passive fire-resistant material, comprises E.G. mixing polyvinyl chloride binders or poly(vinyl chloride-co-vinyl acetate) copolymers with plasticizers/modifiers |
| KR102303462 | (DAEA-N) DAE-A COMTEC CO LTD | Insulation material used for manufacturing insulation products including electric wires, general automobiles and electric vehicles, comprises thermoplastic vulcanizates resin and thermoplastic polyolefin resin, and flame retardant |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---------------------------|---|
| KR102301908 | (DREA-N) DREAMCHEM CO LTD | Flame retardant composition for expanded polystyrene, comprises inorganic flame retardants comprising binder composition and aluminum hydroxide powder or magnesium hydroxide powder including cellulose and melamine-based resin which when coated has preset thickness, water, and flame retardant aids |
| KR102290374 | (WONP-N) WONPOONG CORP | Flame retardant material for digital printing, comprises flame retardant layer coated with E.G. two-component silicone resin, primer layer E.G. methylcyclonucleic acid, and ultraviolet digitally printed digital printing layer |

Antiestáticos

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| WO2021246442 | (ELED) DENKA CO LTD | Soft-magnetic-powder-containing resin composition for molding member that shields electromagnetic noise, comprises thermoplastic resin and soft-magnetic powder, where sheet obtained by molding resin composition exhibits specific magnetic-field component attenuation rate |
| WO2021199477 | (TATD) TATSUTA ELECTRIC WIRE & CABLE CO LTD (UYNA-N) UNIV NARA NAT CORP INST SCI & TECHNOLOGY | Electromagnetic wave shielding material comprises resin and carbon nanotubes |
| JP2021152098 | (NPPP) NIPPON POLYETHYLENE KK | Electroconductive polyethylene resin composition for forming laminate, comprises resin component comprising polar group-containing polyethylene resin and polyethylene resin and carbon black and has preset extraction amount after immersion in light oil, creep resistance, and melt flow rate |

Autorreparadores

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|-------------------------------|--|
| KR102327868 | (SAMS-N) SAMSUNG MAGMA CO LTD | Self-healing rubber asphalt waterproofing sheet used in construction of underground structures, comprises waterproof adhesive layer containing asphalt, styrene-butadiene-styrene rubber, styrene butadiene latex, plasticizer, adhesion enhancer, and slaked lime, surface layer, and release paper |

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|---|---|
| WO2021201670 | (PETR-N) PETRONAS PETROLIAM NASIONAL BERHAD | Self-healing material used for pipeline in oil and gas industry, comprises polymeric matrix, microcapsules comprising shell portion and hollow core portion filled with monomeric or oligomeric healing agent, and metal-organic framework catalyst for catalyzing polymerization of healing agent |
| KR102312109 | (SAMS-N) SAMSUNG MAGMA CO LTD | Self-healing rubber asphalt used for preparing self-healing rubber asphalt waterproofing material for packaging and waterproof pavement, comprises preset amount of straight asphalt, process oil, ionomer, styrene-based plastic polymer, olefinic thermoplastic polymer, reinforcing agent, and tackifier |

Nanocomposites

| Nº DE PUBLICACIÓN | SOLICITANTE | CONTENIDO |
|-------------------|--|---|
| EP3915698 | (GENE) GENERAL ELECTRIC CO | Binder solution for additive manufacturing of green body article, comprises nanoparticles, thermoplastic binder comprising first polymer strand, and solvent |
| KR20210147970 | (ANPO-N) ANPOLY | Nano-cellulose composition for three-dimensional bio-printing comprises epidermal growth factor, low-viscosity Nano-cellulose and nonionic surfactant, that has biocompatibility |
| CZ2020371 | (A3 B6) UNIV V LIBERCI TECCH [CZ] | Method of obtaining a nanostructured hierarchical surface of a positive imprint of a copied natural surface |
| US2021308934 | (TEXA) UNIV TEXAS SYSTEM | Manufacture of nanoimprinted perovskite film or crystal used for forming nanoimprinted device, involves applying solution comprising organometal halide precursor to substrate, annealing, imprinting film, and separating mold from film |
| US2021223686 | (APMA) APPLIED MATERIALS INC | Composition used for preparing imprinted surface, comprises nanoparticles, one or more solvents, surface ligand, additive, and acrylate |
| BR102020002338 | (ALME-I) ALMEIDA B W B (NASC-I) NASCIMENTO L F C (NEVE-I) NEVES M S (OLIV-I) OLIVEIRA C U (PERE-I) PEREIRA A C (SANT-I) SANTOS D L F | Composite material used in production of composite plate and used as layer in multilayer shielding of ballistic armor system for protection against firing of rifle, is based on epoxy resin functionalized with graphene oxide |

VOLVER A
CONTENIDO

SUBVENCIONES PARA EL FOMENTO DE LAS SOLICITUDES DE PATENTES Y MODELOS DE UTILIDAD. CONVOCATORIA 2022

La Oficina Española de Patentes y Marcas, O.A. continúa impulsando en el ejercicio 2022 la utilización de la Propiedad Industrial por las empresas españolas como herramienta de acceso a los mercados internacionales. Con tal finalidad ha publicado en el BOE el día 5 de marzo de 2022 el extracto de la Resolución de la Dirección de la Oficina Española de Patentes y Marcas, O.A., por la que se convoca la concesión de subvenciones en régimen de concurrencia competitiva para el fomento de las solicitudes de patentes y modelos de utilidad españoles y en el exterior para el año 2022. La Resolución de la convocatoria completa está disponible en la BDNS y en la web de la OEPM.

Los objetivos fundamentales de estas ayudas son:

- Estimular la protección internacional de la tecnología a través de las patentes o de los modelos de utilidad, así como contribuir a la mejora de la competitividad de aquellas entidades del sector privado que han emprendido la búsqueda de mercados fuera de España.
- Fomentar la protección de las invenciones nacionales de PYME y personas físicas a través de patentes o de modelos de utilidad.

Las ayudas que se convocan son:

- Subvenciones a la extensión de una solicitud de una patente o de un modelo de utilidad, ante las oficinas nacionales de países terceros u oficinas regionales de patentes, en el marco de procedimientos de concesión de patentes o de modelos de utilidad nacionales o regionales. Entre otros conceptos subvencionables, la convocatoria 2022 incluye: trámites de solicitud, informe de búsqueda, examen o concesión, anualidades de la EPO y validación de patente europea.
- Subvenciones a las actividades realizadas dentro del procedimiento internacional PCT (trámites de solicitud, búsqueda internacional o examen preliminar).

A diferencia de las convocatorias anteriores, en esta convocatoria no se subvencionan los costes de la traducción al idioma del país en el que se realice la extensión de la patente o del modelo de utilidad.

- Subvenciones a las solicitudes de patentes y modelos de utilidad españoles: trámites de solicitud y/o informe del estado de la técnica (IET) para solicitudes de patentes y modelos de utilidad y examen sustantivo para solicitudes de patentes.

La formalización y presentación de solicitudes se tiene que realizar por vía telemática, a través de la Sede Electrónica de la OEPM (<https://sede.oepm.gob.es>) y el plazo de presentación de solicitudes es del 7 de marzo al 5 de abril de 2022.

En la página web de la OEPM (www.oepm.es – Ayudas y subvenciones – *Ayudas para fomento de solicitudes de patentes y modelos de utilidad*) está disponible toda la documentación adicional necesaria: Manual de ayuda y Requerimientos técnicos para rellenar una solicitud de ayuda, Preguntas más frecuentes, Formularios adicionales, etc.

“10 PATENTES ESPAÑOLAS QUE HAN HECHO HISTORIA”: EL NUEVO VIDEO REALIZADO POR "QUANTUM FRACTURE" Y PROMOCIONADO POR LA OEPM

La *Oficina Española de Patentes y Marcas, O.A. (OEPM)*, en el marco de su *Plan Estratégico*, busca promover de forma innovadora el uso de la Propiedad Industrial con la finalidad de transformar la sociedad basada en el conocimiento en generadora de valor y catalizadora de la transformación tecnológica e industrial de nuestro país.

Para ello, se ha lanzado recientemente un video promocionado por la OEPM en el conocido canal de YouTube Quantum Fracture, con José Luis Crespo a la cabeza, donde durante unos 16 minutos se realiza un recorrido histórico de las patentes a través de una cuidadosa selección de las mismas con el fin de dar a conocer su utilidad y su importancia para promover de la innovación y el avance hacia una sociedad más innovadora a la vez que más justa y sostenible.



La elección de José Luis Crespo para conducir esta pieza audiovisual fue motivada por su formación en Física y su actividad como divulgador científico, lo que le conecta indirectamente con la base del mundo de las patentes. Su narración, unida a las animaciones sobre inventos que van desde el siglo XV hasta nuestros días, y a las entrevistas con inventores y personal de la OEPM: el Director de la OEPM, José Antonio Gil Celedonio, la Directora del Departamento de Patentes e Información Tecnológica, María José de Concepción y la responsable del Archivo Histórico de la OEPM, Ana

Naseiro, hacen de este vídeo un instrumento eficaz de difusión que esperamos sea fructífero.

¡Esperamos que os guste tanto como a nosotros!

[Enlace al vídeo “10 Patentes Españolas que han hecho Historia”](#)

REELECCIÓN DE LEOPOLDO BELDA, JEFE DE ÁREA DE PATENTES DE MECÁNICA GENERAL Y CONSTRUCCIÓN, COMO PRESIDENTE DEL COMITÉ PERMANENTE DE DERECHO DE PATENTES DE LA OMPI EN LA SCP33

Por un año más nuestro compañero Leopoldo Belda Soriano (Jefe de área de patentes de mecánica general y construcción de la *OEPM*), fue reelegido Presidente del Comité Permanente de Derecho de Patentes de la *Organización Mundial de la Propiedad Intelectual (OMPI)*.

Su reelección tuvo lugar en la celebración de la *trigésimo tercera sesión del Comité Permanente de Derecho de Patentes* (SCP por sus siglas en inglés) celebrada en la OMPI en Ginebra los pasados 6 y 9 de diciembre.

Además de su reelección, los debates giraron alrededor de los 5 temas habituales del Comité en los últimos años: Excepciones y limitaciones a los derechos de patentes, Calidad de las Patentes, Patentes y Salud, Confidencialidad en las comunicaciones entre agentes de patentes y clientes, y Transferencia de Tecnología.

Asimismo, destacaron las sesiones de intercambio de experiencias en relación con la utilización de la IA por las Oficinas de Patentes, donde se apreció que esta tecnología se está incorporando a un gran número de oficinas y las presentaciones en relación con las bases de acceso gratuito sobre la situación legal de las patentes sobre medicamentos y vacunas; Pat-informed, Medicines Patent Pool y el registro farmacéutico de la Organización Euroasiática de patentes. La OEPM participó con declaraciones y presentaciones en relación con el informe sobre el sistema internacional de patentes, la calidad de las patentes, la confidencialidad en las comunicaciones y la transferencia de tecnología.



[Más Información](#)

CAMPAÑA SENSIBILIZACIÓN FRENTE A FALSIFICACIONES OEPM 2021

La nueva campaña de sensibilización frente a la compra de productos falsificados este año busca estimular la compra de productos originales. El pasado 26 de noviembre tuvo lugar el acto oficial de presentación por parte de la Ministra Reyes Maroto, acompañada del Presidente de la OEPM Pablo Garde y el Director de la misma, José Antonio Gil Celedonio. En sus intervenciones destacaron el compromiso del Ministerio de Industria, Comercio y Turismo con la defensa de los derechos de propiedad industrial (DPI) y la lucha frente a su vulneración.



El objetivo de esta campaña es concienciar a los consumidores para que compren productos originales por los efectos secundarios positivos que conlleva: impulsa el comercio local, fomenta la innovación, protege el medio ambiente, reactiva la economía, cuida la salud, protege tus derechos como consumidor y genera empleo de calidad. Con el

lema Comprar productos originales, tiene efectos secundarios positivos la campaña se difunde en medios de comunicación entre el 10 y el 20 de diciembre, coincidiendo con el pico anual de consumo en los hogares por la cercanía de Black Friday y Navidad.

La campaña estará presente en televisión, radio, prensa, internet, así como en redes sociales con la etiqueta #efectossecundarios.

En el siguiente enlace se encuentra el material de esta campaña, que se complementa con el spot que podrá visionar en la página web:

<https://stopfalsificaciones.oepm.es/index.html>

Esta campaña es uno de los Proyectos del Plan Estratégico 21-24 de la OEPM incluido dentro del Objetivo General 4: Impulsar la lucha contra la falsificación y la vulneración de los derechos de Propiedad Industrial (DPI).

[Más información](#)

