SECTOR CALZADO

# 88 vigilancia tecnológica

1er trimestre 2025

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Este Boletín de Vigilancia Tecnológica en el sector Calzado, viene siendo realizado por la Oficina Española de Patentes y Marcas (OEPM) desde hace más de veinte años, con la colaboración de INESCOP. A partir de 2021 se ha reorientado su contenido para ofrecer a los usuarios y expertos del sector temas más novedosos y de mayor actualidad.

INESCOP es un centro tecnológico que se ha posicionado, durante sus 50 años de vida, como aliado tecnológico y promotor de la innovación entre todas las empresas de la cadena de valor del sector del calzado, tanto a nivel nacional como internacional. Entre sus principales actividades está dar respuesta a los desafíos actuales de la industria, en áreas como: la transformación digital, la reducción del impacto ambiental y el aseguramiento del confort y la salud del usuario. Con su actividad investigadora busca contribuir a los retos sociales con el fin de mejorar el bienestar y la salud de las personas, la sociedad y el planeta.

La Oficina Española de Patentes y Marcas tiene entre sus objetivos la protección y fomento de la actividad de creación e innovación tecnológica en nuestro país, así como la transmisión de la información sobre propiedad industrial de que dispone para orientar la actividad investigadora, a través de sus servicios de información tecnológica, uno de ellos estos Boletines.

El boletín, de forma similar a los demás Boletines que viene realizando la OEPM para distintos sectores tecnológicos, recoge con periodicidad trimestral, una selección de las solicitudes de patente publicadas a nivel internacional del sector Calzado, clasificadas en los siguientes apartados: Adhesivos, Materiales de Corte y Plástico. Para cada documento de patente, un enlace permite consultar el texto completo del mismo en la base de datos Espacenet. Para acceder a aquellos documentos que en la fecha de realización del Boletín no han sido incorporados a Espacenet, se ha incluido un enlace a la oficina nacional de patentes que realizó la publicación, en la que el lector puede llevar a cabo la búsqueda del documento. Se puede acceder a las solicitudes de patente de cada apartado pulsando sobre las imágenes que aparecen en el recuadro a continuación. También, se incluye información de actualidad y proyectos de INESCOP, así como noticias sobre actividades relevantes de la OEPM.

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

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**MATERIALES DE CORTE**

**ADHESIVOS**

**PLÁSTICO**

# MATERIALES DE CORTE

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| AU2024204927 | KYLE KENTIGERN [US] | Shoe device with dual stadium arch bimodal structure for rapid entry and release |
| CN119302484 | ROTHYS INC [US] | Knit article for use with integrated loop fastener portion for being attached to and detached from hook fastener, has knit section forming body of article and loop section, where loop section comprises dropped stitches of knit section |
| CN119547955A | ADIDAS AG [DE] | Footwear article E.G. Slide type sandal, has porous body comprising lattice of interconnected unit cell, and skin layer integrally formed on exterior of porous body and comprising specific porosity and defining ribs that extend outward from porous body |
| CN119655545 | ADIDAS AG [DE] | Shoe upper I.E. Knitted shoe upper, for sports shoe, has inner layer arranged near wearer foot when shoe is worn, and outer layer arranged outside with respect to inner layer when shoe is worn, where inner layer comprises knitted portion |
| GB2631241 | FELIPE SHEWARD [GB]; HILDA DIAZ [GB] | Method for manufacturing composite smart material used in sports shoe, involves providing substrate, and providing shape memory alloy wire, and knitting shape memory alloy wire through silicone substrate, where shape memory alloy wire is nickel-titanium shape memory alloy wire |
| JP2025009002 | ASAHI KASEI CORPORATION, JP | Skin material used in sheet skin material and seat cover for vehicle, has skin layer and base layer which is sheet-like material having polyester-based fibrous material as a skeleton are attached via adhesive layer which is polyester-based resin |
| JP2025034770 | ORIGINAL: YUTAKA MAKE CO. LTD., JP | Footwear E.G. Socks attached to foot portion of wearer, has negative ion radioactive substance and tiptoe mounting portion that includes far infrared ray radioactive substance for mounting tiptoe portion and radiating far infrared ray |
| JP7614688 | NISHIGAKI SOCKS CO. LTD., JP | Functional knitted fabric for socks, has functional yarn that is located between face yarn and back yarn, back yarn is thinner than face yarn, and functional yarn is exposed on second surface side, thus, providing functionality on second surface |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| KR102759553 | WELLINE CO LTD [KR] | Rivet structure for knitting shoes, has hollow portion that is extended in extension direction of extension unit, and coupling unit that is inserted into hollow portion from outside of outsole and fastened to extension unit |
| KR102774710 | BAEKSAN CO LTD, KR | Method for producing regenerated polyurethane artificial leather for making E.G. Bags, involves separating components other than polyurethane from dissolved material using filter for extracting polyurethane and obtaining regenerated polyurethane composition |
| KR102787571 | KANG RAE SUK, KR | Shoe ventilation device, has pumping unit that is installed in straight line within main portion and operates by receiving power from battery unit to suck in external air through inlet, and temperature sensor is installed on side of insole of shoe |
| KR20250020117A | JEONG SU MIN [KR] | Manufacture of plant-derived leather fabric used in accessory product, wallpaper, involves collecting plant-derived materials, selecting from collected plant-derived materials, drying selected plant-derived materials, attaching onto base substrate, and forming protective layer |
| KR20250032434 | PARK SUNG HWA, KR | Earthing barefoot walking cover has wrinkled portion formed along lower periphery of upper portion made of tough and soft fabric like leather, and connected to elastic band, sewn, and finished to provide elastic barefoot walking cover |
| US2025009067 | CROWN G PERFORMANCE TRAINING CORP [US] | Reinforced Boot such as western-style riding boot, for rodeo event participant, has elongated pocket formed in posterior interior surface of shaft portion in parallel alignment with center axis of shaft portion of upper, and elongated stiff insert having dimensions for placement within pocket |
| US2025017308 | NIKE INC [US] | Footwear article for use by athlete, has knitted component formed with first zone, where first zone is provided with course knit, and first zone is integrally knitted with second zone to realizes seamless transition between two zones |
| US2025017323 | NIKE INC [US] | Footwear last having size adjustment capability for use in kit of components for engaging footwear upper with sole structure for making customized footwear products, I.E. dance shoe, has first fastener component that includes bolt, and the second fastener component includes nut |
| US2025024915 | NIKE INC [US] | Vacuum system for article of footwear or apparel |
| US2025034765 | BIOFLUFF INC [US] | Pile-fabric textile has plant-based base, and pile fibers comprising plant fibers affixed to base at first end of each fiber, where pile fibers have preset fiber density per square centimeter of base per square centimeter of base |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| US2025040650 | NIKE INC [US] | Knit element with cushioning and rigidity zones, uppers and footwear with the same, and methods of manufacturing the same |
| US2025040662 | BARRERA STRATTON JESUS [US] | Insole covering system for insole cover pertains to new insole cover for covering insole removably positioned within shoe, has interior pocket to receive insole of shoe, and sleeve formed of cloth material which is infused with copper |
| US2025049169 | NIKE INC [US] | Article of Footwear such as running shoe, has knitted upper secured to sole structure, knitted upper included with knit zone with knit layer located on outer-facing surface of upper, and first knit zone provided with first knit layer located on outer-facing surface of knitted upper |
| US2025049394 | ASPEN MEDICAL PRODUCTS LLC [US] | Orthopedic precast for use in orthopedic braces and wearables with hardening thermoplastic material for sensor deployment and retention, used by patient E.G. Humans, has first portion including first set of interwoven strands of first thermoplastic material |
| US2025049604 | ASPEN MEDICAL PRODUCTS LLC [US] | Orthopedic precast for being operated as an initial structure used in producing orthosis, has portion comprising layer of material interwoven with thermoplastic material, where components include multiple fasteners or pulley elements |
| US2025072550 | LESS IS FOREVER MORE INC [US] | Boot such as western-style boot, for covering one or more toes of wearer, with storage pouch, has vamp configured to cover foot of wearer, and heel that is attachable at rear portion of outsole, pouch arranged on inner surface and configured to be accessible by wearer from outer surface of shaft |
| US2025072556 | UNDER ARMOUR INC [US] | Article of footwear for defining longitudinal and lateral direction worn by athletic for activities such as running, has upper coupled to outsole, where midsole arranged on outsole, where upper and midsole define foot cavity, and support plates includes bore used to receive detent on outsole |
| US2025089840A1 | NIKE INC [US] | Article of footwear E.G. Basketball shoe, has knitted net layer that is integrally knitted with knitted base layer, and inlaid strands that are extended between base layer and net layer |
| US2025098810 | NIKE INC [US] | Upper for an article of footwear I.E. Shoe, has knitted component comprising course and edge that partially defines medial side or lateral side of throat opening of upper, where inlaid segment that inlaid within portion of first course of knitted component |
| US2025099638A1 | LIU MEGAN T [US] | Device I.E. Shoe sanitizer for sanitizing shoes, such as boots or high-top sneakers, has cover attached to central body, where central body comprises set of UV light sources, and central body is extendable such that central body changes in length to accommodate shoes of different dimensions |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025003637 | INOVEIGHT LTD [GB] | Manufacture of microporous polymer membrane used as layer for functional fabric, involves coating substrate with dispersion containing organic solvent, polymer, graphene nanoplatelet and pore forming agent and inducing phase inversion by immersion precipitation |
| WO2025006126 | DOW GLOBAL TECHNOLOGIES LLC [US] | Fiber used for forming fabric spunbond nonwoven fabric, bonded carded web, woven fabric, knitted fabric, woven tape and artificial turf, comprises regions and component containing post-industrial resin and acrylate-based compatibilizer and present in regions |
| WO2025006914 | DUPONT SAFETY & CONSTRUCTION INC [US] | Thermally bonded sheet of nonwoven flash-spun plexifilamentary fibrils used for forming multilayer structure, has preset basis weight, average trapezoidal tear resistance, average tensile strength, BET surface area, and Gurley Hill porosity |
| WO2025006924 | DUPONT SAFETY & CONSTRUCTION INC [US] | Thermally bonded sheet of nonwoven flash-spun plexifilamentary fibrils having specified total crystallinity index, delamination strength, surface robustness and handle-o-meter stiffness, used E.G. In article |
| WO2025006930 | DUPONT SAFETY & CONSTRUCTION INC [US] | Thermally bonded sheet of nonwoven flash-spun plexifllamentary fibrils used to produce E.G. Roof linings and in article, having specified basis weight, Gurley Hill porosity, hydrostatic head, handle-o-meter stiffness and opacity |
| WO2025006942 | DUPONT SAFETY & CONSTRUCTION INC [US] | Thermally bonded sheet of nonwoven flash-spun plexifilamentary fibrils used for preparing multilayer structure for production of garments, has preset basis weight, particle filtration efficiency, hydrostatic head, and moisture vapor transmission rate |
| WO2025007048 | NIKE INC [US] | Computerized method for designing and manufacturing knitted component for creating article, such as articles of footwear, involves automatically modifying article design input data based on modification of knit structure |
| WO2025008065 | WACKER CHEMIE AG [DE] | Electrospinning dispersion used for forming nonwoven fabric, comprises water, at least one emulsifier and/or at least one hydrophilic polymer and at least one silicone elastomer composition which is selected from addition-crosslinking or radically crosslinking silicone elastomer composition |
| WO2025008067 | WACKER CHEMIE AG [DE] | Electrospinning dispersion E.G. For crosslinked nonwoven fabric comprises water, emulsifier, hydrophilic polymer and silicone elastomer composition containing addition-crosslinking and radically crosslinking silicone elastomer composition |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025008068 | WACKER CHEMIE AG [DE] | Electrospinning dispersion used for producing crosslinked nonwoven fabric, comprises water, at least one emulsifier and/or at least one hydrophilic polymer, and at least one silicone elastomer composition selected from addition-crosslinking or radically-crosslinking silicone elastomer composition |
| WO2025017055A1 | CERDIA INT GMBH [CH] | Fiber material useful E.G. For nonwoven products, comprises fibers of limited length, preferably short fibers, continuous fibers and staple fibers, and chitin and cellulose based on natural polymer-based mixed fibers and fiber mixtures |
| WO2025018069 | TORAY INDUSTRIES [JP] | Artificial leather for use in manufacture of automobile interior material, automobile component and seat of vehicle such as general passenger car, comprises fibrous base material obtained by entangling and integrating nonwoven fabric with woven fabric |
| WO2025019475 | NIKE INNOVATE CV [US]; NIKE INC [US] | Vacuum system for wearable article of footwear E.G. Shoes and/or apparel, has pump that is operable to selectively engage port of adjustable element to adjust pressure of interior void between first pressure an second pressure different than first pressure |
| WO2025019634 | IMMUNOLIGHT LLC [US]; UNIV ARIZONA [US] | Optical waveguide for textile yarn, comprises outer coating made of low-kappa dielectric material and having porosities in which each porosity transits from outer surface of coating to outer surface of core at interface, such that wavelengths transmitted through core are emitted through porosities |
| WO2025022339 | GRUPPO MASTROTTO SPA [IT] | Manufacture of flexible laminar product used for E.G. Footwear, involves depositing silicone resins on sample to make negative cast, gluing cast to create molding plate, heating, depositing layer of polyurethane mixture, cooling, crosslinking layer of polyurethane mixture, and detaching product |
| WO2025024907 | MABE BIO [BR] | Composition used to prepare laminated material I.E. Used as alternative material to animal and/or synthetic leather, comprises plant source extract, thickening agent, plasticizing agent, solvent agent, and surfactant and/or auxiliary agent |
| WO2025026795 | BASF SE [DE]; BASF CHINA CO LTD [CN] | Composition used for forming rubber article E.G. Air spring, bellow, conveyor belt, hose and rubber band, comprises antiozonant comprising hydrogenated quinoline derivative |
| WO2025026845 | TFL LEDERTECHNIK GMBH [DE] | Tanning or re-tanning process for leather or leather intermediate used for making tanned or re-tanned leather as buffed grain as split leather for automotive or other land craft related purposes, aircraft, watercraft, furniture, involves tanning after pre-treatment, re-tanning, working up and drying |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025029637 | NIKE INC [US] | Article for footwear used by athlete for improving performance by applying heat, cooling, and pressure to wearer foot, has footwear upper engaged with sole structure, where footwear upper includes interior upper layer formed from interior upper component parts |
| WO2025029998 | NIKE INNOVATE CV [US]; NIKE INC [US] | Knit heel element for use in article of footwear E.G. Running shoe, has second knit composite zone that is provided with low-melting thermoplastic material and second knit structure, knit collar that is integrally extended from second knit composite zone, and is provided with elastic yams |
| WO2025030362 | NIKE INNOVATE CV [US]; NIKE INC [US] | Jig system for securing knitted component or textile on jig frame for article of footwear, has pin attachment sites and jig inserts collectively defining outer securing boundary for securing outer boundary of textile to frame |
| WO2025038502A2 | ASPEN MEDICAL PRODUCTS LLC [US] | Orthopedic precast with thermal cover for custom orthosis creation |
| WO2025038529 | NIKE INNOVATE CV [US]; NIKE INC [US] | Article of footwear with enhanced durability features |
| WO2025042760 | NIKE INC [US] | Footwear article for extending between lateral side and medial side of shoe, has tightening portion that is coupled to second end of adjustable lace, and is configured to transition upper to tightening position through pulling tightening portion in second pulling direction |
| WO2025045678A1 | ON CLOUDS GMBH [CH] | Textile sheet product for use in upper for shoe I.E. Sports shoes, has thermoplastic filament that forms multiple partially superimposed loops along filament path and multiple crossings at which thermoplastic filament crosses itself and forms material-bonded connection with itself |
| WO2025049089A1 | NIKE INNOVATE CV [US]; NIKE INC [US] | Footwear article device E.G. Shoe, has frame including footwear plate, and arced shield arranged integral with footwear plate and configured to extend transversely from footwear plate partially over superior portion of wearer foot |
| WO2025049107 | DOW GLOBAL TECHNOLOGIES LLC [US] | New ionomer having ethylene acid copolymer having polymerized reaction product of ethylene, alkyl acrylate and monocarboxylic acid monomers, used in article E.G. Molded article or foam, footwear applications including midsoles or insoles |
| WO2025054581 | NIKE INNOVATE CV [US]; NIKE INC [US] | Method for determining fit or attributes associated with wearable article I.E. Shoe based on stretch sensor data, involves sending first second stretch sensor data, and visual or indication of score to user device for presentation |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025056930 | BIOTECH MAT J D O O [HR] | Obtaining vegan leather alternatives used in textile industry involves malting barley for alcohol production, isothermal mashing, cooking, washing, filtering leftover husk, drying, milling, and mixing organic solvent with obtained mixture |
| WO2025064460 | NIKE INNOVATE CV [US]; NIKE INC [US] | Article of footwear with a knitted net layer |
| WO2025064506 | NIKE INC [US] | Method for actively forming at least portion of article of footwear use on only one foot of wearer, involves flowing material from each channel, out respective outlet port of channel mounted on outer surface of last that solidifying material on surface to form portion of footwear |

VOLVER A CONTENIDO

# ADHESIVOS

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| ES2994109 | MACARIO MESEGUER CARLOS [ES] | UV LED printer for custom printing on immobilized footwear, has support that is made up of five elements such as support base, central lifting pillar, mobile elements adaptable to different shoe sizes and height-adjustable studs depending on shape of shoe |
| CN119431752 | LARGAN MEDICAL CO LTD [TW] | Polymer, E.G., biodegradable polymer used in composition and product, where composition is substrate, curing material, adhesive material, repair material, coating material, comprises constituent monomer of polymer comprising 2-hydroxyethyl methacrylate, lactide and caprolactone |
| WO2025007292 | HENKEL AG & CO KGAA [DE]; HENKEL CHINA INVEST CO LTD [CN] | Aqueous polyurethane adhesive composition used for forming activated products, comprises polyurethane polymer comprising soft segment derived from polyester polyol and hard segment derived from polyisocyanate, water, and optionally thickening agent, defoamer and mattering agent (sic) |
| GB2633636 | GENERATION PHOENIX LTD [GB] | Coating used in substrate for clothing, footwear, accessories or upholstery, comprises first biodegradable polymer, second biodegradable polymer, and compatibilizer, where first biodegradable polymer is elastomer, and elastomer is most abundant component of coating |
| KR102758363 | SAM BU FINE CHEMICAL CO LTD [KR]; PARK HEE DAE [KR] | Manufacture of hot melt nonwoven fabric for E.G. Clothing, involves extruding adhesive resin selected from thermoplastic polyurethane and ethylene vinyl acetate containing hydrophobic nano silica, from extruder and melt-spinning fiber into meltblown nonwoven web, trimming and winding |

VOLVER A CONTENIDO

# PLÁSTICO

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| CN119348036 | ADIDAS AG [DE] | Method for producing E.G. Shoe sole, of sports shoe from foam particles for sports clothing, involves filling mold space, and heating foam particles with electromagnetic waves to weld, where parameter characteristic for absorption of electromagnetic waves is monitored |
| CN119458742 | KING STEEL MACHINERY CO LTD [TW] | Injection molding method for forming article E.G. Portion of footwear, such as outsole with different physical or functional properties, involves forming first component from first mixture, where second mixture is injected into mold cavity through second feeding port |
| CN119488195 | ADIDAS AG [DE] | Method for producing component E.G. Outsole for sporting good E.G. Sports shoe, sports clothing or sports equipment, involves mixing polymer with solvent to produce liquified polymer, and curing liquified polymer to produce component |
| CN119547954 | ASICS CORP [JP] | Footwear E.G. Shoe used for running and footwear used for specific ball sports typified by tennis and basketball, comprises footbed for supporting sole of foot of wearer and including ground-contacting surface |
| DE102023118927 | LEDERETT LEDERFASERWERKSTOFF GMBH SIEBENLEHN [DE] | Leather fiber material used for laminate, used in furniture industry, interior design industry and free-form construction or shoe industry such as shoe manufacturing for heel caps, heels, comprises vegetable-tanned leather fibers, binding agents, low-heavy metal or heavy metal-free, additives |
| GB2633633 | INOVEIGHT LTD [GB] | Sole structure for E.G. Athletic shoes used for E.G. Running activities, has support component formed from substantially non-deformable material and connected between outsole component and midsole component in predetermined region of hindfoot sole portion |
| JP2025012540 | AIR WATER PERFORMANCE CHEMICAL INC. [JP] | Resin used for producing non-foamed polyurethane molded product, is obtained by using polyol which is polyester polyol obtained by esterification reaction of polyhydric alcohol component and polycarboxylic acid component, polyisocyanate and polymerization inhibitor |
| JP2025014891 | ASAHI KASEI CORPORATION, JP | Filament for additive production, has continuous reinforcing fiber bundle that is formed by aggregating above filaments, and image of cross-section is photographed by microscope |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| JP2025039298 | ASICS CORP [JP] | Sole structure for spike shoes, has reinforcing fiber whose average length is included in reinforcing area of portion positioned astride overlapping area, and non-overlapping area is longer than projection length of collar portion from cylindrical portion |
| JP2025042089 | FUJIWARA SABURO, JP | Anti-slip sheet comprises sheet material made of soft resin, anti-slip material made of ceramic particles fixed on sheet material, and coating layer covering the sheet material and anti-slip material |
| KR102763091 | KIM JUN BEOM [KR] | Sole of shoe for degenerative arthritis patient, has material portions whose inclination angles are varied continuously along longitudinal direction of main portion, where inclination angle is gradually increased along longitudinal direction, to reach maximum in central area of main portion |
| KR102769833 | HONG JAE HWA [KR] | Grounding shoe for barefoot walking exercise, has sole portion anchored to ground whose outer side surface has thickness of sole bottom so that voltage value becomes zero when measuring voltage between foot and ground |
| KR102771099 | CHOI NA DO [KR] | Shoe grounding device mounted on shoe, has metallic element that is arranged on sole of shoe, strap fastened to user foot, and conductive element which is plate-shaped braided wire formed by weaving multiple strands |
| KR20250000005 | SONG YEO JIN, KR | Free heel adjustment device for shoes, has sole, spring and heel adjustment button of shoe that are fixed and made up of one body and are not completely fixed to shoe heel, such that spring pushes out and heel is slightly exposed |
| KR20250030983 | DONG BO S. M CO. LTD., KR | Shoe insole marking device |
| KR20250030984 | DONG BO S. M CO. LTD., KR | Shoe Sole using PU Casting Method and Its Manufacturing Method |
| KR20250031383 | SUNJE HI-TEK CO LTD, KR | Method for manufacturing shoe soles using radical coating surface treatment and shoes including the same |
| TWM665225 | DAH SHENG INTERNATIONAL CO LTD [TW]; CHANG HSUN CHENG [TW] | Rolled rubber insole for shoes, has anti-slip rubber layers partially attached to foam layer stacked in sequence, where fiber layer is non-woven fabric and foam layer is porous after foaming |
| US2025024913 | ELNEKAVEH ALEXANDER [US] | Mid-sole assembly for athletic shoe used for walking, running, and field games, has lower mid-sole that is arranged between upper shank and lower shank, upper mid-sole is arranged above upper shank, void space is formed in lower mid-sole, and upper and lower shanks provide aft ends and forward ends |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| US2025026923 | GOODYEAR TIRE & RUBBER [US] | Tire component formed from rubber composition for automotive applications, comprises two rubber elastomers selected from balanced polymer based on elastomer, bio-derived plasticizer, and bio-derived filler system comprises silica and carbon black, which is partially derived from bio-based feedstock |
| US2025040655 | NIKE INC [US] | Sole structure for article of footwear |
| US2025049173 | ACUSHNET CO [US] | Golf shoe for use by golfer during golf swing, has first set of directional traction elements and/or second set of directional traction elements including set of directionally aligned traction elements with sidewalls that are oriented in same direction |
| US2025049175 | NIKE INC [US] | Sole structure for article of footwear |
| US2025057280 | BABAIAN WALTEN [US] | Exercise shoe for exercising and stretching of muscles, ligaments, and tendons of legs, ankles, and feet of wearer, has slate door that defines cavity to receive weights of varying mass within inner compartment, and upper sole positioned over base structure to provide cushioning effect |
| US2025072553 | HETTAS SPORT LTD [CA] | Athletic shoe for providing structural integrity, support, and stability to specific areas E.G. Forefoot, of foot, has heel region that includes contoured incurvature and protrudes externally from between upper midsole and lower midsole to form sidewall that encompasses heel region of upper midsole |
| US2025072554 | JEON EUN GYUM [KR] | Antistatic insole integrated dustproof work shoe, has insole laid on top of outsole, and insole made using nickel-plated copper fabric in combination with carbon-graphene yarn and provided in bottom of shoe that comes into contact with foot |
| US2025084193 | EXXONMOBIL TECHNOLOGY & ENGINEERING COMPANY [US] | Polyethylene composition, E.G., unimodal, long-chain branching used for blown film, comprises ethylene-derived unit, where polyethylene composition is prepared by introducing ethylene, optional comonomer, diluent, and catalyst to loop reactor under conditions sufficient to produce slurry |
| US2025089843 | NIKE INC [US] | Article of footwear I.E. Shoe, has base foot support component comprises upper-facing surface and ground-facing surface that are arranged opposite to each other, where base foot support component is formed with passageway that extends from forefoot region to heel region |
| US2025098813 | NIKE INC [US] | Sole structure for article of footwear and related method of assembly |
| WO2025000086 | KUMU CORP [CA] | Manufacturing bioproducts sustainably used as E.G. Paper alternative, and cardboard alternative, by contacting first bioproduct with extracting media to recover biopolymer, and manufacturing second bioproduct using recovered biopolymer |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025004114 | TACCHIFICIO ZANZANI S R L [IT] | Method for providing bottoms of footwear E.G. Sports footwear, involves extracting sole from cavity until complete combining of mixture with shell with consequent obtaining of bottom of shoe comprising outer shell and core constituted by mixture |
| WO2025005268 | UBE CORP [JP] | Polyamide-based elastomer used in resin composition for forming layer of laminate for molded article E.G. Shoe sole, comprises hard segment comprising polyamide structure, and structural unit derived from iminodialkanoic acid compound, and soft segment comprising polyether structure |
| WO2025006531 | NIKE INC [US] | Sole structure for footwear, has first subset, second subset and rear pocket, which are all separated from central pod by web area, where set of pockets is partially enclosed by first recesses and second recesses |
| WO2025012888 | SAIDBUN RIDWAN [ID] | Footwear E.G. Hybrid shoe-sandals for sports, has peak performance and stabilizer layer with strobe booster that gives bounce power to wearer, and outer sole layer on its upper side having front and rear indentations accommodated by front and rear damping layer placed beneath stabilizer |
| WO2025019175 | NIKE INC [US] | Sole structure for article of footwear, has cushioning component that partially defines chamber, and sole component including projection that interfaces with recess in outer surface of cushioning component or protrudes from inner surface of component into chamber |
| WO2025021906 | WHAT THE FUTURE B V [NL] | Machine used in continuous production of molded product, comprises production direction comprising forming station with shaped master mold, filling station suited to add liquid curable composition to shaped recess of shaped plastic film mold, and pressing station |
| WO2025026747 | BASF SE [DE] | System for producing syngas and/or chemical product or polymer product used in E.G. Component of car, has control unit which is provided for adjusting feed flow rate of feed streams according to biogenic carbon content of syngas and/or optional chemical products |
| WO2025026801 | BASF SE [DE] | Plant used in continuous production of syngas with controlled properties, comprises pre-treatment units, distributing unit which is upstream of and fluidically connected to each pre-treatment unit, gasifiers, and distributing unit which is upstream of and fluidically connected to each gasifier |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025026814 | ARKEMA FRANCE [FR] | Recycle of polyamide originating from product containing polyamide, used for forming article E.G. Gloves, involves pre-treating product, and extruding with degassing under reduced pressure to obtain composition having preset proportion of volatile constituent lower than that of product composition |
| WO2025029327 | NIKE INC [US] | Rubber composition for forming vulcanized product used for article of footwear component such as outsole, comprises polymeric component comprising uncured rubber, recycled footwear rubber and macrocyclic polymer additive, and curing package comprising sulfur and optionally curing accelerator |
| WO2025029471 | NIKE INNOVATE CV [US]; NIKE INC [US] | Sole structure for article of footwear, has sidewall that is provided with first portion extending along one of medial side of sole structure and lateral side of sole structure and is provided with first concave portion in forefoot region and convex portion in heel region |
| WO2025031933 | LA SPORTIVA S P A [IT] | Climbing shoe, has upper contoured to accommodate user's foot and sole fixed to lower part of upper, where sole has front sole portion to face metatarsophalangeal region of sole of foot accommodated in shoe |
| WO2025032301 | DECATHLON SA [FR] | Manufacturing elastic yarn by melt spinning using spinning machine comprises feeding extruder with granules of copolymer to obtain by extrusion molten elastomer of copolymer and spinning molten elastomer to obtain thread copolymer |
| WO2025032482 | CENTITVC CENTRO DE NANOTECNOLOGIA E MATERIAIS TECNICOS FUNCIONAIS E INTELIGENTES [PT]; UNIV AVEIRO [PT]; ICC IND E COMERCIO DE CALCADO SA [PT] | Footwear E.G. Personal protective equipment-safety footwear for improving user vascular system, has compression module and/or vibratory module that are configured to repeat cycles of vibration to activate circulation of user's feet |
| WO2025032673 | TAICA CORP [JP] | Thermoplastic resin composition comprises styrenic thermoplastic elastomer comprising block copolymer(s) comprising styrene block and butadiene block, and having preset carbon-carbon double bond holding butadiene content, and softener |
| WO2025033312 | MITSUI CHEMICALS INC [JP] | Polyurethane elastomer used for molded article, comprises product of curing agent and isocyanate-terminated prepolymer comprising product of polyisocyanate component including bis(isocyanatomethyl)cyclohexane, and polyol component comprising E.G. Low-molecular-weight polyol containing 1,4-butanediol |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025033527 | KURARAY CO [JP] | Polyamide resin composition for forming molded article, comprises polyamide with aliphatic diamine units, bromine-based flame retardant having particles with preset number average value of cross-sectional area, inorganic filler, aromatic vinyl copolymer and organic colorant and/or inorganic colorant |
| WO2025035064 | NIKE INNOVATE CV [US]; NIKE INC [US] | Sole structure for article of footwear, has outsole that is arranged adjacent to bottom side of lower cushioning element and including one or more protrusions each extending through respective one of one or more apertures and engaging bladder |
| WO2025038792 | UNIV TEXAS TECH SYSTEM [US] | Treatment of textile E.G. Antimicrobial textile such as cotton, wool, silk, hemp, viscose, pashm, camel and cashmere, involves contacting textile with antimicrobial agent comprising reactive dye or crosslinking agent comprising ester or ether-forming organo-selenium compound in treatment solution |
| WO2025040551 | BASF SE [DE] | Polymer composition used in production of polymer product E.G. Charge air cooler flap, intake pipe, connector, gasket, gear wheel and hose, comprises polymer, component comprising phosphorus, component comprising metal cation and anion, and additive(s) |
| WO2025043088 | ARTEAGA LETICIA [US] | Article for foldable footwear E.G. Flat thin sandal, has first folding-assist mechanism and second folding-assist mechanism that is configured to assist in folding footwear and divides outsole layer into front outsole portion, middle outsole portion, and rear outsole portion |
| WO2025043246 | KIM DANIEL [US] | Heat sensitive mixed adhesive useful in substrate, obtaining permanently bonded substrates, shoe assembly, fusing upper of shoe to sole and de-bonding composite, comprises adhesive base and thermo-conductive carbon content material |
| WO2025045674 | ON CLOUDS GMBH [CH] | Method for producing shoe, involves foaming molten thermoplastic polymer midsole material inside cavity to provide foamed midsole and establishing material-bonded connection between upper and foamed midsole |
| WO2025045677 | ON CLOUDS GMBH [CH] | Method for manufacturing foamed shoe component I.E. Foamed shoe sole E.G. Midsole used in sports shoes, involves injecting polymer composition into molding compartment, and foaming molten thermoplastic polymer inside molding compartment to provide foamed shoe component |

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|---|
| WO2025045687 | ON CLOUDS GMBH [CH] | Method for manufacturing sole unit of shoe, involves melting polymer composition at first temperature to provide molten polymer composition, and applying molten polymer composition on second surface of midsole in form of filament forming multiple loops on second surface, thus forming outsole |
| WO2025047723 | CANON KK [JP] | Polyurethane elastomer used forming molded component, comprises matrix and domains dispersed in matrix, and forms molded component comprising domains having specific arithmetic mean value of equivalent sphere diameters, and another molded component having specific micro rubber hardness |
| WO2025048778 | HEWLETT PACKARD DEVELOPMENT CO [US] | Flexible structure for use in cushioning objects in motion for shock absorption or for providing effective bounce back, used in shoes, has interlinked beams that are curved and are interlinked to define multiple concave rhombus forms, where rhombus form is linked to two other rhombus forms |
| WO2025058847 | NIKE INC [US] | Sole system for article of footwear, has sole unit with set of spaced apart apertures extending though sole unit, between inwardly and outwardly facing surfaces, and sole unit has protruding unit extending outward from base surface of outwardly surface |
| WO2025064765 | NIKE INNOVATE CV [US]; NIKE INC [US] | Sole structure for article of footwear, has cushion including first recess provided on first side of cushion and second recess provided opposite to first recess, where first recess receives first projection and second projection |

VOLVER A CONTENIDO

# NOTICIAS

## Nuevas oportunidades circulares entre el sector calzado y el canal HORECA

El sector del calzado, integrado en el tejido industrial europeo, se encuentra inmerso en un proceso de transformación hacia modelos de producción más sostenibles y circulares, en línea con los objetivos de descarbonización marcados por la Unión Europea para 2050. En este contexto, la búsqueda de materias primas recicladas y la incorporación de tecnologías que faciliten su integración en los procesos de fabricación se perfilan como elementos clave para avanzar hacia un modelo de producción más eficiente y alineado con los principios de la economía circular.

El proyecto HOR-Eco, con financiación del Instituto Valenciano de Competitividad Empresarial (IVACE), trabaja en esta dirección mediante la investigación y aplicación de tecnologías innovadoras para la gestión y valorización de residuos generados en el sector HORECA (Hoteles, Restaurantes y Cafeterías). Tanto el aprovechamiento de estos residuos como materias primas secundarias para el sector calzado, como la posible reintroducción de residuos del propio calzado en nuevas aplicaciones vinculadas al canal HORECA, son objeto de las investigaciones de INESCOP en el marco de este proyecto.

### Del residuo al recurso: valorización de materiales del sector HORECA

El sector HORECA, de importante relevancia económica en nuestro país, es una de las principales fuentes de residuos multicomposición, debido a la necesidad frecuente de sustituir determinados productos por razones de seguridad, higiene o deterioro derivado del uso. Artículos como zapatillas de cortesía, colchones, textiles, pelotas de golf, mobiliario plástico de exterior o envases de amenities deben renovarse con regularidad, lo que genera un volumen significativo de residuos, cuya gestión presenta desafíos técnicos que requieren de tratamientos específicos para ser valorizados.

En este contexto, el proyecto HOR-Eco aplica diferentes tecnologías de pretratamiento orientadas a facilitar la recuperación y transformación de estos residuos, mediante procesos como la desinfección, la reducción de volumen y la separación automatizada de materiales reciclables mediante infrarrojo cercano (NIR). La identificación y aplicación de estas tecnologías, junto con su proceso de separación de materiales en la planta piloto Circular Industry – CV disponible en las instalaciones de INESCOP, permite obtener materiales reciclados con potencial de uso en diferentes sectores, como en el sector del calzado. Esta línea de trabajo contribuye a reducir la dependencia de materias primas vírgenes, ampliar las opciones de diseño sostenible y fomentar la circularidad del producto desde sus fases iniciales de desarrollo.

### Sinergias entre sectores para una economía circular

El proyecto HOR-Eco promueve un modelo de simbiosis industrial en el que sectores estratégicos de la Comunitat Valenciana, como el turismo, el calzado, el textil o el juguete, colaboran en el aprovechamiento cruzado de recursos. A través de esta cooperación, los residuos generados en un sector pueden convertirse en materias primas para otro, fomentando la innovación, la eficiencia en el uso de recursos y la creación de nuevas oportunidades de negocio.

En este marco, el calzado se presenta como un ejemplo destacado, ya que algunos de los materiales reciclados procedentes del sector HORECA muestran potencial para su aplicación en componentes como por ejemplo la fabricación de plantillas a partir de materiales espumados procedente de colchones. De forma complementaria, se estudia la utilización de residuos del propio calzado orientándolos hacia productos útiles para el canal HORECA, como mobiliario, elementos ornamentales o soluciones estructurales.

Este enfoque bidireccional refuerza la capacidad tanto del sector calzado como del HORECA para adaptarse a nuevos marcos legislativos y ambientales, al tiempo que responde a las crecientes exigencias del mercado y del consumidor en materia de sostenibilidad, circularidad y uso eficiente de los recursos.

## Hacia una transformación circular

La investigación desarrollada en el marco del proyecto HOR-Eco pone de relieve el potencial de transformar residuos complejos en materiales reciclados con propiedades técnicas aplicables en sectores como el calzado y el HORECA. Esta estrategia abre nuevas oportunidades para incorporar criterios de circularidad en los procesos de diseño y producción, favoreciendo modelos más eficientes y responsables.

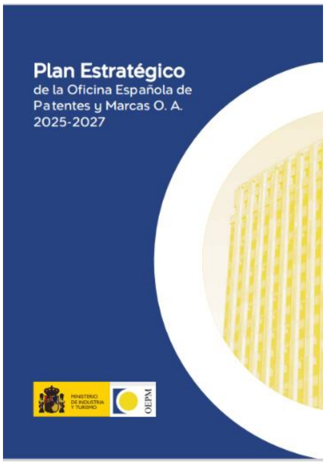
En esta línea, HOR-Eco destaca la necesidad de avanzar hacia un modelo productivo intersectorial y resiliente, donde la colaboración y la innovación permitan al sector del calzado y el sector HORECA dar un paso firme hacia la integración de soluciones circulares en sus estrategias industriales.

Más información: **https://inescop.es/es/inescop/actividad/proyectos-i-d-i/proyectos-i-d-i-ivace/ivace/60-2024/786-hor-eco**

Si eres una empresa de calzado interesada en la implementación de soluciones innovadoras para la circularidad en cualquiera de las etapas del ciclo de vida del calzado y su fabricación, no dudes en contactar con INESCOP **proyectos@inescop.es**.

GENERALITAT VALENCIANA
INSTITUTO VALENCIANO DE COMPETITIVIDAD E INNOVACIÓN
Financiado por la Unión Europea

## Presentado el plan estratégico 2025-2027 de la OEPM: una hoja de ruta para afrontar el futuro con éxito




El pasado 14 de febrero se presentó el Plan Estratégico 2025-2027 de la Oficina Española de Patentes y Marcas (OEPM), que constituye la hoja de ruta a seguir para continuar prestando servicio a la ciudadanía con la calidad y excelencia debidas durante los próximos tres años.

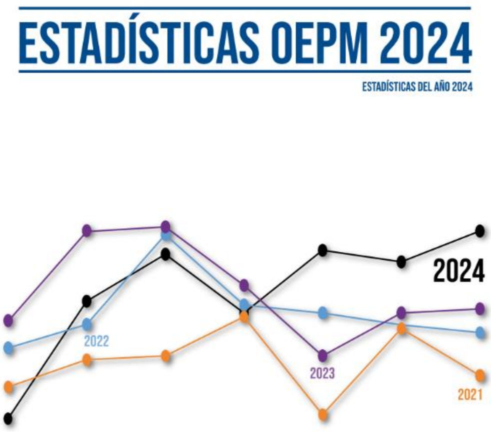
Esta nueva planificación estratégica tiene en cuenta los retos y oportunidades que brinda el futuro más inmediato, así como los recursos con que cuenta la OEPM para afrontar esta nueva coyuntura. Todo ello, sin perder de vista la misión de impulsar el desarrollo económico, la innovación y la competitividad a través del fomento del conocimiento y el uso de la Propiedad Industrial (PI).

El Plan Estratégico se compone de cuatro grandes objetivos que coadyuvarán al cumplimiento de esta misión y al mantenimiento del rigor en la prestación de los servicios públicos. Primero de todo, se establece la necesidad de promover un mayor uso estratégico de la Propiedad Industrial, acercándola a la sociedad y haciéndola más accesible. Asimismo, se pretende aprovechar la coyuntura de transformación digital que experimenta nuestro país para incrementar aún más la calidad de los servicios prestados y, con ello, la satisfacción de los usuarios.

**Más información**

## La OEPM publica sus cifras definitivas para el 2024

Se han publicado desde la Oficina Española de Patentes y Marcas (OEPM) las cifras definitivas, correspondientes a las estadísticas de las distintas modalidades de propiedad industrial del 2024.




Analizando modalidad por modalidad, y en cuanto a los signos distintivos, 2024 ha sido el año con mayor número de solicitudes de registro de toda la serie histórica conjunta de marcas nacionales y nombres comerciales. Concretamente, las solicitudes de marcas nacionales crecen el 5,1% con respecto al año anterior y los nombres comerciales, el 2,1%, hasta situarse en su máximo histórico.

Respecto a las invenciones destaca el incremento, por segundo año consecutivo, de las validaciones de patentes europeas presentadas en España (+12,7%).

Las patentes nacionales, tras el repunte de 2023, descienden un 10,9% y vuelven a las cifras de 2022. Este decremento procede, sobre todo, de la caída de las patentes PCT (Tratado de Cooperación en materia de Patentes) en fase nacional, ya que las solicitudes de patente nacional suben el 2,2% respecto al año pasado.

Las restantes modalidades de invenciones muestran comportamientos dispares. Mientras que las solicitudes de modelos de utilidad caen un 3,7% en 2024, las de certificados complementarios de protección experimentan un crecimiento del 9,6%.

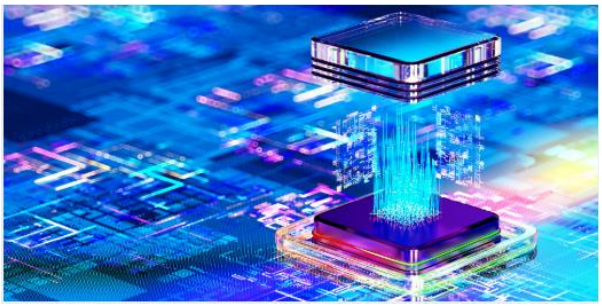
Las solicitudes de diseños industriales mantienen buenos números tras la exponencial subida de 2023. Así, aunque el número total de diseños desciende ligeramente (4,3%, cuando en 2023 hubo un incremento del 33,6% interanual), el número de expedientes continúa al alza (3,1%).

El porcentaje de concesiones asciende al 54% para el caso de patentes nacionales y al 86% en modelos de utilidad, marcas y nombres comerciales.

**Más información**

## España es el país de Europa que más crece en solicitudes de patentes europeas

Cada vez un mayor número de empresas e inventores españoles adquieren conciencia sobre la importancia de proteger adecuadamente sus invenciones. Así lo reflejan los datos del Índice de Patentes 2024, un informe anual publicado por la Oficina Europea de Patentes (EPO, por sus siglas en inglés) que analiza la situación del sistema de patentes en el ecosistema europeo de la innovación y la tecnología, a través de sus cifras.



Las empresas e inventores españoles presentaron un total de 2192 solicitudes de patentes europeas en 2024, un 3% más que el año anterior. No obstante, si nos remontamos una década en el tiempo, España es el país de Europa que ha experimentado un mayor crecimiento, con un incremento acumulado del 44% desde 2015 hasta la actualidad. Esta tendencia pone de manifiesto la apuesta por la innovación de las empresas, los centros de investigación y los emprendedores españoles, lo que les permite competir en el mercado tecnológico europeo.

España lidera, además, el listado de países europeos con mayor porcentaje de mujeres inventoras nombradas en las solicitudes de patentes europeas presentadas ante la EPO. Concretamente, el 42% de las solicitudes provenientes de nuestro país incluía, a menos, a una mujer inventora. Esta cifra es muy superior a la media de los 39 Estados miembros de la EPO, que es del 25%. España se consolida, por tanto, como el máximo referente en términos de igualdad de género en este ámbito.
Respecto al origen de las solicitudes, las universidades y los centros públicos de investigación continúan jugando un papel muy destacado, siendo el Consejo Superior de Investigaciones Científicas (CSIC) el mayor solicitante de patentes europeas de nuestro país.

**Más información**

## La OEPM reivindica el papel de la mujer en la Propiedad Industrial


La innovación femenina vive un momento dulce en nuestro país. Y es que España es el país de Europa que cuenta con un mayor porcentaje de mujeres inventoras, según se desprende de las cifras ofrecidas por la Oficina Europea de Patentes (EPO, por sus siglas en inglés).

La Oficina Española de Patentes y Marcas O. A. (OEPM) celebró el pasado 24 de marzo el acto ‘Registrando el cambio. 50 años de innovación femenina en España’ para analizar cómo ha cambiado el papel de la mujer en este ámbito y rendir homenaje a las pioneras que lo hicieron posible.

El acto, enmarcado en la iniciativa ‘España en libertad. 50 años’, contó con la presencia del ministro de Industria y Turismo, Jordi Hereu, encargado de su apertura y quien reivindicó que “mirar atrás sirve para celebrar lo conseguido y analizar los obstáculos que aún quedan por sortear”.

**Más información**