

Boletín VT eDEPENDENCIA

1.º trimestre 2022

49

Vigilancia Tecnológica

El Consejo de Europa define la **dependencia** como "la necesidad de ayuda o asistencia importante para las actividades de la vida cotidiana", o, de manera más precisa, como "un estado en el que se encuentran las personas que por razones ligadas a la falta o la pérdida de autonomía física, psíquica o intelectual, tienen necesidad de asistencia y/o ayudas importantes a fin de realizar los actos corrientes de la vida diaria y, de modo particular, los referentes al cuidado personal".

El presente boletín, elaborado por la Unidad de Información Tecnológica de la Oficina Española de Patentes y Marcas (OEPM), pretende revisar la evolución de la innovación, en el marco de las patentes de las tecnologías TIC en relación con aspectos tales como la accesibilidad de las personas mayores o con algún tipo de

discapacidad a las nuevas tecnologías de la información y comunicaciones, los dispositivos de ayuda a la movilidad física o la atención de personas en situación de dependencia a través de servicios de teleasistencia domiciliaria y monitorización remotas.

De este modo, el boletín, de periodicidad trimestral, recogerá las publicaciones más recientes de solicitudes internacionales de patentes (solicitudes PCT) publicadas en el trimestre inmediatamente anterior a su elaboración. Se ha restringido el ámbito de este boletín a solicitudes PCT por considerarse que al ser estas solicitudes con las que las empresas pretenden proteger sus invenciones en distintos países, se corresponden con invenciones de una cierta relevancia tecnológica.

CONTENIDO:

- Accesibilidad a las nuevas tecnologías de la información
- Ayuda a la movilidad
- Teleasistencia sanitaria
- Otras referencias

NIPO: 116-19-012-2



Oficina Española de Patentes y Marcas, O.A.
UnidadInformacionTecnologica@oepm.es

Solicitudes de Patente Publicadas

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

ACCESIBILIDAD A LAS NUEVAS TECNOLOGÍAS DE LA INFORMACIÓN

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|------------------------------------|---|
| WO 2022057609 A1 | IBM | Physical cursor control in microfluidic display devices |
| WO 2022058820 A1 | IBM | Wearable device enablement for visually impaired user |
| WO 2022043371 A1 | INVENTIO AG | Elevator system having elevator operating devices for passengers with limited mobility |
| WO 2022048776 A1 | ERICSSON TELEFON AB L M | A computer software module arrangement, a circuitry arrangement, an arrangement and a method for an improved user interface |
| WO 2022047097 A1 | ENVOY MEDICAL CORP | Programming of cochlear implant accessories |
| WO 2022008622 A1 | #26INSTITUT MINES TELECOM | Scleral lens comprising a cover portion encapsulating one or more electronic components and configured to leave the pupil of the lens-wearing eye visible |
| WO 2022051368 A1 | ENCHROMA INC | Spectral glare control eyewear for color blindness and low vision assistance |
| WO 2022053330 A1 | INVENTIVIO GMBH | Tactile graphics reader |
| WO 2022053306 A1 | CONTINENTAL AUTOMOTIVE GMBH | Method and hmi allowing a display suitable for users who have difficulty in perceiving colors |
| WO 2021236274 A1 | MICROSOFT TECHNOLOGY LICENSING LLC | Localization and visualization of sound |
| WO 2022055567 A1 | MICROSOFT TECHNOLOGY LICENSING LLC | Colorblind assistive technology system and method |
| WO 2021257280 A1 | SNAP INC | Blind assist eyewear with geometric hazard detection |
| WO 2022043916 A1 | SONY GROUP CORP | Audio enhancement for hearing impaired in a shared listening environment |
| WO 2022036365 A1 | BEACON STREET INNOVATIONS LLC | Refreshable tactile display |
| WO 2022013603 A1 | SHAMS IDEN | Hearing alert |
| WO 2021257984 A1 | BOSE CORP | Earpiece charging case detection |
| WO 2022045472 A1 | JEON SOO A | Piezoelectric linear motor-based braille cell |
| WO 2021260368 A1 | UNIV OF ESSEX ENTERPRISES LIMITED | Visual assistance |
| WO 2022010331 A1 | TAGFREE CO LTD | Button for both contact and non-contact use, button device usable both contactually and cotactlessly, and recognition method thereof |
| WO 2021256318 A1 | SONY GROUP CORP | Information processing device, information processing method, and computer program |
| WO 2021257838 A1 | SONY GROUP CORP | Multiple output control based on user input |
| WO 2022014818 A1 | ASAN FOUND | Device and method for providing visual perception training using visual perception learning |
| WO 2022003255 A1 | SEETRUE TECH OY | Gaze tracking for near-eye ocular device |
| WO 2022009229 A1 | RAJAGOPAL KRISHNA THIRUVENGADAM | Device, to enable computer programming for visually impaired users |
| WO 2022023904 A1 | MYPINPAD LTD | Data input and overlay device for use with a touchscreen |
| WO 2022020344 A1 | PENN STATE RES FOUND | Augmented reality hand guidance application for people with visual impairments |
| WO 2022026304 A1 | TOUCHPAD PRO ASSISTIVE TECH LLC | Tactile drawing and writing apparatus for the visually impaired |
| WO 2022011432 A1 | UNIV SWINBURNE TECHNOLOGY | Wearable vibro-tactile feedback device |

[...ver más](#)



AYUDA A LA MOVILIDAD

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|--|--|
| <u>WO 2022043995 A1</u> | RAPOPORT ANATOLI | Head-mounted guide unit for blind people |
| <u>WO 2022043862 A1</u> | IUVO S R L | Exoskeleton device for outdoor activities and components for use therewith |
| <u>WO 2022043843 A1</u> | ECOLE POLYTECHNIQUE FED LAUSANNE EPFL | Hand exoskeleton for rehabilitation and assistance of hand motor functions |
| <u>WO 2021261794 A1</u> | JS CHEM CORP | Method and device for recognizing gait information using plurality of magnetic sensors |
| <u>WO 2022015160 A1</u> | UNIV DELFT TECH | A virtual reality wearable system |
| <u>WO 2022055443 A1</u> | YILDIZ TEKNIK UNIV | Method for robotic feeder platform for disabled individuals |
| <u>WO 2022036327 A1</u> | CAMINO ROBOTICS INC | Robotic rollator walker with automated power drive |
| <u>WO 2022047377 A1</u> | MACRI VINCENT JOHN | Digital virtual limb and body interaction |
| <u>WO 2022053447 A1</u> | HUMAN MECHANICAL TECH | Exoskeleton comprising an elastic element |
| <u>WO 2022049533 A1</u> | THEIA GUIDANCE SYSTEMS LTD | Mobility assistance device and method of providing mobility assistance |
| <u>WO 2022004983 A1</u> | SAMSUNG ELECTRONICS CO LTD | Supporter having bistable spring, and exercise assistance apparatus including same |
| <u>WO 2021247292 A1</u> | DEPHY INC | Systems and methods for a compressed controller for an active exoskeleton |
| <u>WO 2021259841 A1</u> | TK HOME SOLUTIONS B V | Method for raising an alert in connection with the use of a platform lift |
| <u>WO 2022045482 A1</u> | MEDIENVI TECH | Automatic excreta disposal device |
| <u>WO 2022016218 A1</u> | MIRCEA EUGEN VIRGIL COCIUBAN THE TRUSTEE FOR ROFRAUS TRUST | Descending mechanised access ramp (d-mar) |
| <u>WO 2021242742 A1</u> | ROAM ROBOTICS INC | Direct drive pneumatic transmission for a mobile robot |
| <u>WO 2022019093 A1</u> | PANASONIC IP MAN CO LTD | Daily-life activity state assessment system, daily-life activity state assessment method, program, daily-life activity state assessment apparatus, and daily-life activity state assessment device |
| <u>WO 2022023251 A1</u> | OTTOBOCK SE & CO KGAA | Orthopedic device |
| <u>WO 2021211359 A1</u> | TOYOTA RES INST INC | Wearable exoskeleton |
| <u>WO 2021260448 A1</u> | UNIV SANTIAGO DE CALI | Robotic platform for hippotherapy and method for cognitive assessment and stimulation |
| <u>WO 2022020777 A1</u> | HOME CARE PRODUCTS INC | Door mat |
| <u>WO 2021245317 A1</u> | TECNIMUSA S L | Rehabilitation device |
| <u>WO 2022006384 A1</u> | GEORGIA TECH RES INST | Exoskeleton systems and methods of use |
| <u>WO 2022006659 A1</u> | EPIC SAFETY INC | Method and apparatus for detecting fall events |
| <u>WO 2021252614 A1</u> | UNIV NORTHERN ARIZONA | Cable-actuated, kinetically-balanced, parallel torque transfer exoskeleton joint actuator with or without strain sensing |

[...ver más](#)

TELEASISTENCIA SANITARIA

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|----------------------------------|------------------------------|---|
| WO 2022049710 A1 | NEC CORP | Service providing device, service providing system, service providing method, and non-transitory computer readable medium |
| WO 2022044017 A1 | TINGO MEDICAL LTD | Continuous glucose sensor and mounting assembly |
| WO 2022048829 A1 | INNOVOLO LTD | Alert system |
| WO 2021255717 A1 | SAEKEL KILIAN | Method of interactive physical and cognitive training based on multi-sensory, external stimulation and body gesture sensing |
| WO 2022009158 A1 | RONDISH COMPANY LTD | Patient monitoring sensor pad |
| WO 2022050940 A1 | FUTUREWEI TECHNOLOGIES INC | Power efficient agent monitoring devices and methods |
| WO 2022046649 A1 | ENVISION ANALYTICS INC | Assessing patient out-of-bed and out-of-chair activities using embedded infrared thermal cameras |
| WO 2022036047 A1 | HOUSCH ROBIN DAWN | Wearable tracking device and system for tracking people and personal items |
| WO 2022051710 A1 | UNIV NORTHEASTERN | Method for visual function assessment |
| WO 2022035822 A1 | BAXTER INT | Iv dressing with embedded sensors for measuring fluid infiltration and physiological parameters |
| WO 2022035809 A1 | ACUCELA INC | System and method for optical coherence tomography a-scan decurving |
| WO 2022047006 A1 | BAND CONNECT INC | System and method for remotely providing and monitoring physical therapy |
| WO 2022008582 A1 | ONTEX BV | Monitoring device attachable to an absorbent article, and respective method and absorbent article |
| WO 2021253071 A1 | UMPS HEALTH PTY LTD | System, method and device for monitoring wellbeing |
| WO 2022006354 A1 | MADKAN ASHWANI | Eye examination device, system and method |
| WO 2022026725 A1 | STARKEY LABS INC | Hypoxic or anoxic neurological injury detection with ear-wearable devices and system |
| WO 2022043748 A2 | PRECI HEALTH SA | Capillary blood sampling device and method of use |
| WO 2022005969 A1 | ABBOTT DIABETES CARE INC | Systems, devices, and methods for meal information collection, meal assessment, and analyte data correlation |
| WO 2021256822 A1 | KOREA INST SCI & TECH INF | Activity of daily living-based dementia prediction method and device therefor |
| WO 2022009469 A1 | HITACHI LTD | Trust information providing system |
| WO 2022020267 A1 | GET GRIN INC | Systems and methods for modeling dental structures |
| WO 2022023951 A1 | DUEARITY AB | Energy transmitting device and system to monitor and treat tinnitus |
| WO 2021257898 A1 | CIRCADIA TECH LTD | Systems, apparatus and methods for acquisition, storage, and analysis of health and environmental data |
| WO 2022035690 A1 | PATEL KEVIN | System for remote medical care |
| WO 2022029414 A1 | GYROGEAR LTD | Systems and methods for tremor management |
| WO 2021242621 A1 | NEC LAB AMERICA INC | Free flow fever screening |
| WO 2022004241 A1 | PANASONIC IP MAN CO LTD | Receiver, signal processing system, and human analysis system |
| WO 2022020174 A1 | MEDIBEACON INC | Systems and methods for home transdermal assessment of gastrointestinal function |
| WO 2021247272 A1 | UNIVERSAL ELECTRONICS INC | System and method for providing a health care related service |
| WO 2022040335 A1 | SHIFRIN COOPER | Apparatus and method of managing pressure injuries |
| WO 2022009166 A1 | DARVIS INC | Systems and methods for monitoring subjects |
| WO 2022031343 A1 | ARRIS ENTPR LLC | Device, method, and computer readable medium for sending an emergency message |
| WO 2022024192 A1 | NIPPON TELEGRAPH & TELEPHONE | Information processing device, information processing method, and program |
| WO 2022031628 A1 | WEAVR HEALTH CORP | Systems and methods for acquisition and testing of biological samples |
| WO 2022010412 A1 | PINK NECTARINE HEALTH AB | A personal device, a system and methods for transmitting data associated with the personal device |
| WO 2021258004 A1 | HARROW IP LLC | Systems and methods for remote monitoring and treatment of intraocular pressure disease |
| WO 2022026997 A1 | UNIV MINNESOTA | Wearable ambulatory sensors for measurement of breathing motions |

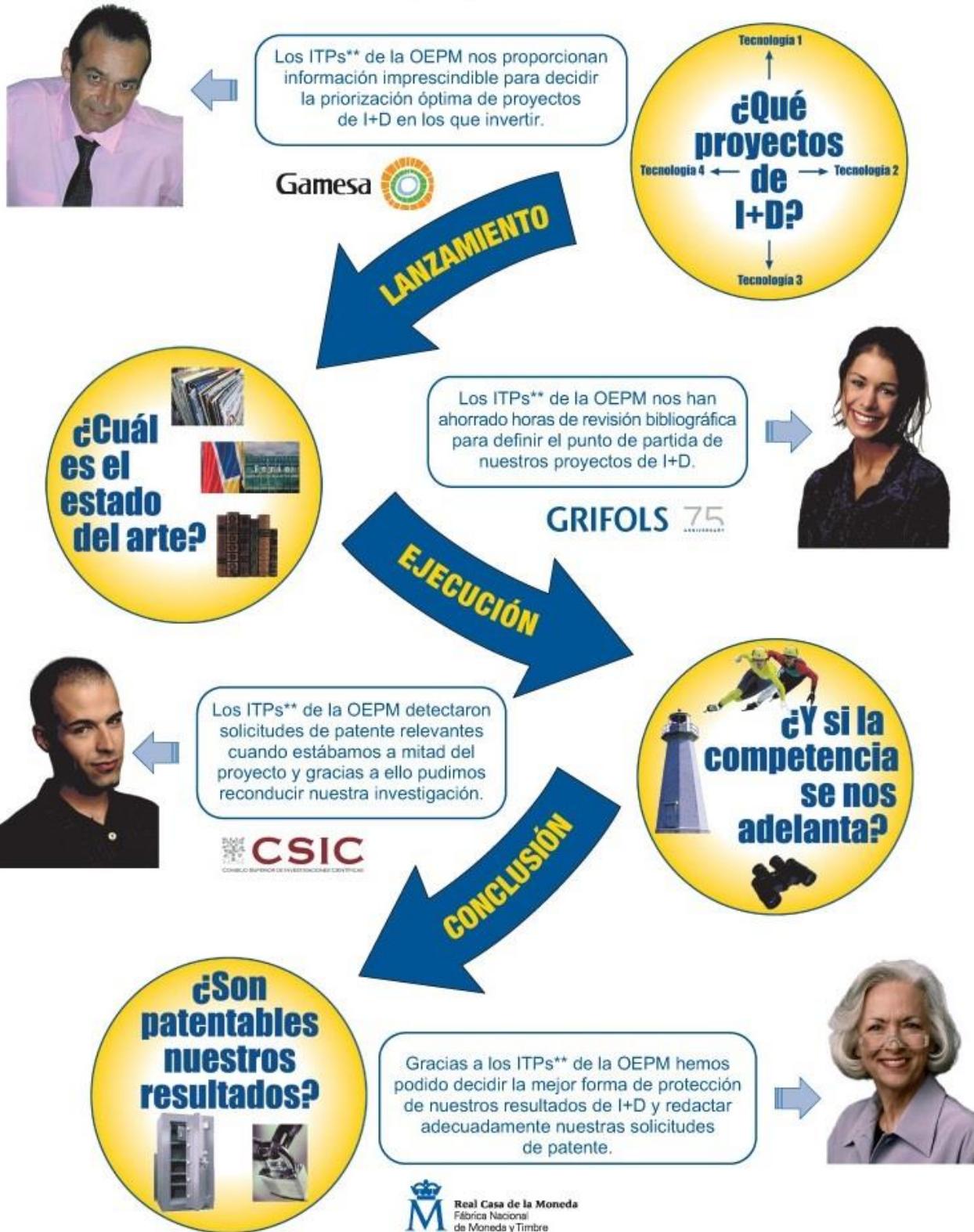
| | | |
|---|---------------------------|---|
| WO 2022026993 A1 | UNIV NORTHWESTERN | Antimicrobial choice algorithm for urinary tract infections |
| WO 2021262905 A2 | BRAINBOX SOLUTIONS INC | Multimodality systems and methods for detection, prognosis, and monitoring of neurological injury and disease |

[..ver más](#)

OTRAS REFERENCIAS

| Nº PUBLICACIÓN | SOLICITANTE | CONTENIDO TÉCNICO |
|---|---|--|
| <u>WO 2022047613 A1</u> | CHONGQING INST GREEN & INTELLIGENT TECH CAS | System and method for analyzing ad or mci or cn disease development trend by means of multi-modal modeling |
| <u>WO 2022034301 A1</u> | BARRETT EMILY | Bed restraining apparatus and method of use thereof |
| <u>WO 2021239169 A1</u> | VIVA CV S R O | An automobile module for transport of handicapped persons, a handling assembly for this module, an automobile with the assembly, and a method of transferring the module |
| <u>WO 2022051808 A1</u> | AUCURO PTY LTD | A device for holding a shower head |
| <u>WO 2021256921 A1</u> | UNIV EINDHOVEN TECH | Two-dimensional optical waveguide pressure sensor array |
| <u>WO 2022015472 A1</u> | COVIDIEN LP | Sensor including electrically conductive material containment assembly |
| <u>WO 2022042968 A1</u> | ZAHNRADFABRIK FRIEDRICHSHAFEN | Camera-based registration of patients in an event causing great damage |
| <u>WO 2022040701 A1</u> | SP INT USA INC | Portable urinary aid device |
| <u>WO 2022038818 A1</u> | HITACHI LTD | Behavior recommendation device and behavior recommendation method |
| <u>WO 2022008397 A1</u> | KONINKLIJKE PHILIPS NV | User interface for x-ray tube-detector alignment |
| <u>WO 2021260526 A1</u> | MOR RESEARCH APPLIC LTD | System and method for characterizing droopy eyelid |
| <u>WO 2022005164 A1</u> | KO YOUNG JI | Bed robot apparatus |
| <u>WO 2021236524 A1</u> | INSURANCE SERVICES OFFICE INC | Machine learning systems and methods for multiscale alzheimer's dementia recognition through spontaneous speech |
| <u>WO 2022006513 A1</u> | UNIV WAKE FOREST HEALTH SCIENCES | Blood pressure digital health devices, systems, and methods of use |
| <u>WO 2021250232 A1</u> | SENSIBLE HOLDING B V | Portable device for continuous analysis of a body fluid of a patient |
| <u>WO 2022005162 A1</u> | KO YOUNG JI | Bathing robot device |

¡¡Por sólo 500€ añada 150 especialistas* a su Equipo de I+D!!



* La OEPM cuenta con más de 150 examinadores de patentes especializados en los diversos sectores tecnológicos y en la búsqueda de información científico-técnica.

** Los Informes Tecnológicos de Patentes o ITPs son estudios a la medida que incluyen una búsqueda de patentes y de literatura científica con un análisis en profundidad de los documentos más relevantes. Su coste es de 440 euros más IVA.