

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 remota.

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

## 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
<a href="#">WO 2023097085 A2</a>	TWENTY TWENTY THERAPEUTICS LLC	Intraocular laser projection system
<a href="#">WO 2023097277 A1</a>	HEARING GLASSES LLC	Smart glasses to assist those who are deaf or hard of hearing
<a href="#">WO 2023106510 A1</a>	JIN YIN JI	Online integrated service provision system
<a href="#">WO 2023099223 A1</a>	ESSILOR INT	Computer-implemented method, apparatus, system and computer program for controlling a sightedness impairment of a subject
<a href="#">WO 2023094250 A1</a>	ESSILOR INT	Computer-implemented method, apparatus, system and computer program for providing a user with a representation of an effect of a sightedness impairment control solution
<a href="#">WO 2023110662 A1</a>	UNIV DE LORRAINE	System for learning braille and method for implementing such a system
<a href="#">WO 2023106802 A1</a>	THE CATHOLIC UNIV OF KOREA INDUSTRY ACADEMIC COOPERATION FOUNDATION	Method for providing chatbot for rehabilitation education for hearing loss patient, and system therefor
<a href="#">WO 2023046252 A1</a>	UNIV AALBORG	Non-invasive tongue based interface
<a href="#">WO 2023059712 A1</a>	TEAM IP HOLDINGS LLC	System and method for performing consumer hearing aid fittings
<a href="#">WO 2023068917 A1</a>	ROZENBERGS MIERVALDIS	Ergonomic keyboard
<a href="#">WO 2023095141 A1</a>	AMEDI AMIR	Tactile representation of location characteristics and content in 3d
<a href="#">WO 2023047647 A1</a>	SONY GROUP CORP	Information processing device, information processing method, and program
<a href="#">WO 2023090104 A1</a>	KARASHIMA RIICHI	Communication support tool and method for using same
<a href="#">WO 2023047712 A1</a>	KK KEIJITSU	Remote controller (infrared transmitter) having edged reflection plate
<a href="#">WO 2023067613 A1</a>	RAMAN R	A non-surgical hearing system and method thereof
<a href="#">WO 2023079402 A1</a>	SONY GROUP CORP	Display of signing video through an adjustable user interface (ui) element
<a href="#">WO 2023058985 A1</a>	SAMSUNG ELECTRONICS CO LTD	Refrigerator and control method thereof
<a href="#">WO 2023054996 A1</a>	PARK DU GO	Object-recognizing wearable device using hand or finger tracking
<a href="#">WO 2023077246 A1</a>	UNIV ANTOFAGASTA	Glove-type tactile device that allows areas of light and dark to be detected on an illuminated surface, converting a light signal into a vibration signal, which is useful for blind persons
<a href="#">WO 2023075613 A1</a>	KARA TECH LIMITED	Method for generating animated sentences for sign language translation
<a href="#">WO 2023070061 A1</a>	UNIV WASHINGTON	Directional audio source separation using hybrid neural network
<a href="#">WO 2023055293 A2</a>	NAT UNIV SINGAPORE	Mouthguard system for human machine interaction

[...ver más](#)

## AYUDA A LA MOVILIDAD

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
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<a href="#">WO 2023108086 A1</a>	THE REGENTS OF THE UNIV OF CALIFORNIA	Systems and methods for predictive shoulder kinematics of rehabilitation exercises through immersive virtual reality
<a href="#">WO 2023056309 A1</a>	REDLINE INNOVATIONS INC	Lifting device and associated methods
<a href="#">WO 2023099538 A1</a>	ROOWALK MOBILITY GMBH	Mobility assistance device
<a href="#">WO 2023061927 A1</a>	FUSION LAB TECH SARL	Method for notifying a visually impaired user of the presence of object and/or obstacle
<a href="#">WO 2023088669 A1</a>	GERMAN BIONIC SYSTEMS GMBH	Exoskeleton having an automatic actuating unit for size adjustment, and associated methods
<a href="#">WO 2023111978 A1</a>	MAKESENSE TECH LIMITED	Sensory substitution devices
<a href="#">WO 2023105835 A1</a>	PARAMOUNT BED CO LTD	Information processing device and information processing method
<a href="#">WO 2023107176 A1</a>	UNIV OF PITTSBURGH OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION	Systems and methods for brain-computer interface and calibrating the same
<a href="#">WO 2023102650 A1</a>	UNIV OF MANITOBA	Exoskeletal upper limb rehabilitation device
<a href="#">WO 2023110741 A1</a>	OTTO BOCK HEALTHCARE PRODUCTS GMBH	Orthopaedic device and method for producing same
<a href="#">WO 2023049976 A1</a>	N DE ARAUJO SELLIN DESENVOLVIMENTO DE SIST LTDA	Robotic guide dog for assisting the movement of persons with visual deficiencies or reduced mobility, and itinerary mapping and sharing method
<a href="#">WO 2023072678 A1</a>	ETH ZUERICH	Device and method for arrangement on a body comprising an essentially rotation-symmetric portion, and method for moving and/or manipulation of an object using the device
<a href="#">WO 2023057727 A1</a>	WANDERCRAFT	Method for moving an exoskeleton
<a href="#">WO 2023075587 A1</a>	IZAGUIRRE PEREZ PAOLA ARALID	Exoskeleton system for orthoses and prostheses of hand phalanges
<a href="#">WO 2023038550 A1</a>	OBSHCHESTVO S OGRANICHENNOI OTVETSTVENNOSTI U «EXAURUS»	Wearable device for supporting a user's arms
<a href="#">WO 2023085949 A1</a>	EXOTEK AS	A four-wheel driven, all-terrain vehicle
<a href="#">WO 2023059428 A1</a>	BATTELLE MEMORIAL INSTITUTE	Systems and methods for reducing spasticity after neurological injury
<a href="#">WO 2023076573 A1</a>	LIFEDRIVE LLC	Drive manager for power wheelchair and related methods
<a href="#">WO 2023061907 A1</a>	CONSEJO SUPERIOR INVESTIGACION	An anatomical model for measuring the interaction of an exoskeleton with a biological limb assisted by said exoskeleton
<a href="#">WO 2023062469 A1</a>	NEUROLUTIONS INC	Orthosis system with interchangeable effector assembly
<a href="#">WO 2023068440 A1</a>	KOREA ADVANCED INST SCI & TECH	Robot hand system and method for controlling robot hand
<a href="#">WO 2023069698 A1</a>	UNIV PITTSBURGH COMMONWEALTH SYS HIGHER EDUCATION	Active pressure relieving system
<a href="#">WO 2023079184 A1</a>	UNIV BRUSSEL VRIJE	Exoskeleton
<a href="#">WO 2023078202 A1</a>	SHENTAI MEDICAL TECH SHANGHAI CO LTD	Wearable lower limb exoskeleton robot and hip joint adjustment apparatus thereof

[...ver más](#)

## TELEASISTENCIA SANITARIA

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
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<a href="#">WO 2023062420 A1</a>	CORE SAFE MEDICAL SL	Method and apparatus for smart respiratory monitoring by electrocardiogram, breath acoustics and thoracic acceleration
<a href="#">WO 2023101629 A1</a>	TORLAK MUSTAFA SAVAS	A smart electrotherapy system
<a href="#">WO 2023105453 A1</a>	CYBERLIVER LTD	System and computer method including a digital biomarker (dbm), clart, for remotely assessing hepatic encephalopathy for cirrohtic patients
<a href="#">WO 2023105923 A1</a>	SHARP KK	Communication terminal, base station, terminal program, base station program, communication system, and communication method
<a href="#">WO 2023104489 A1</a>	MEDTRONIC IRELAND MFG UNLIMITED COMPANY	Identifying suitable candidates for denervation therapy
<a href="#">WO 2023094288 A1</a>	SAULE S A	A single-cell photovoltaic module for iot applications
<a href="#">WO 2023099389 A1</a>	ORANGE	Connected neural stimulator interface, connected-object manager, connected electronic device, method for starting up a connected neural stimulator interface, and method for controlling an electronic device
<a href="#">WO 2023102419 A1</a>	MARANI HEALTH INC	Apparatus for non-invasive acquisition of maternal and/or fetal physiological signals
<a href="#">WO 2023044115 A1</a>	TURNINGMODE LLC	Physiological well-being and positioning monitoring
<a href="#">WO 2023076593 A1</a>	GOVERNMENT OF THE US SECRETARY OF COMMERCE	Lung fluid monitor and monitoring fluid level in a lung
<a href="#">WO 2023044268 A1</a>	SOUNDVIEW TECH SOLUTIONS	Medical device alarm method and system
<a href="#">WO 2023076105 A1</a>	TWENTY TWENTY THERAPEUTICS LLC	Fluid osmolarity sensing and associated systems, devices, and methods
<a href="#">WO 2023072725 A1</a>	BIOTRONIK SE & CO KG	Implantable medical device for sensing physiological signals
<a href="#">WO 2023072726 A1</a>	BIOTRONIK SE & CO KG	Implantable medical device for sensing physiological signals
<a href="#">WO 2023053257 A1</a>	NEC CORP	Information processing system, information processing device, information processing method, and non-transitory computer-readable medium having program stored therein
<a href="#">WO 2023069466 A2</a>	VIOPTIX INC	Handheld oximeter with display of real-time, average measurements and status indicator
<a href="#">WO 2023073240 A1</a>	IBISVISION LTD	Method and system for determining eye test screen distance
<a href="#">WO 2023053474 A1</a>	NEC CORP	Care giver arrangement system, care platform system, care giver arrangement method, and computer-readable storage medium
<a href="#">WO 2023054912 A1</a>	SAMSUNG ELECTRONICS CO LTD	Electronic device, and biometric information notification method for electronic device
<a href="#">WO 2023064183 A1</a>	STRYKER CORP	Patient support apparatus with patient weight monitoring
<a href="#">WO 2023052928 A1</a>	VOHRA SANDEEP	A machine learning and artificial intelligence based tool for screening emotional & mental health for an individual or a group or masses
<a href="#">WO 2023064911 A1</a>	PREC NEUROSCIENCE CORPORATION	Apparatus, systems, and methods for high-bandwidth neural interfaces
<a href="#">WO 2023064184 A1</a>	STRYKER CORP	Patient support apparatus with graphical guidance
<a href="#">WO 2023042402 A1</a>	FUJI CORP	Behavior monitoring system and behavior monitoring method
<a href="#">WO 2023096383 A1</a>	BAE SANG WOON	Method for detecting lung disease using smartphone, and smartphone
<a href="#">WO 2023076950 A1</a>	INVISALERT SOLUTIONS INC	Method and apparatus for preventing elopement
<a href="#">WO 2023063070 A1</a>	TOKYO INST TECH	Neural electrode for recording and/or stimulation purposes which is intended to be adhered to brain surface upon use, and recording or stimulation method using same
<a href="#">WO 2023054295 A1</a>	TERUMO CORP	Information processing device, information processing method, and program
<a href="#">WO 2023093313 A1</a>	GUANGDONG OPPO MOBILE TELECOMMUNICATI ONS CORP LTD	Device positioning method and apparatus, electronic device, storage medium, and program product

<a href="#">WO 2023060119 A1</a>	HEARTBEAM INC	Method and apparatus for reconstructing electrocardiogram (ecg) data
<a href="#">WO 2023042708 A1</a>	KYOCERA CORP	Recommended exercise presenting device, server device, exercise therapy assisting system, recommended exercise presenting method, and control program
<a href="#">WO 2023096172 A1</a>	SAMKWANG THERAPY CO LTD	Led lighting device for internet of things, system for monitoring solitary person by using same, and method for monitoring solitary person by using same
<a href="#">WO 2023077014 A1</a>	LONGEVITI NEURO SOLUTIONS LLC	Cranial implant with wire management structure
<a href="#">WO 2023074276 A1</a>	NEC PLATFORMS LTD	Information processing system, information processing device, information processing method, and non-transitory computer-readable medium

[..ver más](#)

## OTRAS REFERENCIAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2023101624 A1</a>	REGONESI GIULIANO	Uv hand sterilization device with photocatalysis
<a href="#">WO 2023064087 A1</a>	META PLATFORMS TECH LLC	Detecting physical aspects of an eye using inward-facing sensors in an artificial reality headset
<a href="#">WO 2023111522 A1</a>	MANCHESTER UNIV NHS FOUNDATION TRUST	Respirator device
<a href="#">WO 2023051863 A1</a>	SKIBA MARCEL	Recreational and sports item for water sports
<a href="#">WO 2023104549 A1</a>	ARJO IP HOLDING AB	Patient hoist
<a href="#">WO 2023094630 A1</a>	MAEUSLI ALEXANDRE	Method, apparatus and/or system for determining information on a package containing medicaments and/or for delivering the package
<a href="#">WO 2023067288 A1</a>	ELIMAJE	System for detecting a target substance in a sample
<a href="#">WO 2023073583 A1</a>	COGNITIVE SYSTEMS CORP	Methods and systems for time spread assembled csi for wideband channels
<a href="#">WO 2023050114 A1</a>	SHENZHEN MINDRAY BIOMEDICAL ELECTRONICS CO LTD	Blood pressure calibration method, blood pressure measuring apparatus and method, and storage medium
<a href="#">WO 2023059453 A1</a>	EDISON WELDING INST INC	Tele-manufacturing system
<a href="#">WO 2023102382 A1</a>	EMED LABS LLC	Lateral flow test kits
<a href="#">WO 2023067208 A1</a>	GALVEZ CASAS RAFAEL	Support for artistic representations for people who are blind, and production method thereof
<a href="#">WO 2023059348 A1</a>	AXIOM INNOVA INC	Vision screening device, vision impairment screening system, improved vision screening process, method of assessment, and method of use
<a href="#">WO 2023074178 A1</a>	UNICHARM CORP	Information processing device, information processing method, and information processing program
<a href="#">WO 2023047078 A2</a>	NICOVENTURES TRADING LTD	Aerosol provision system
<a href="#">WO 2023046719 A2</a>	NESTLE SA	Methods and devices for improving sleep quality and/or subsequent behavioural outcomes
<a href="#">WO 2023047131 A2</a>	I GLO LTD	Improved safety features for tactile profiles

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