

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: 088-17-024-6

## 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 2018144289 A1</a>	MICROSOFT TECHNOLOGY LICENSING LLC	Braille chording accessory for a game controller
<a href="#">WO 2018144288 A1</a>	MICROSOFT TECHNOLOGY LICENSING LLC	Refreshable braille display accessory for a game controller
<a href="#">WO 2018115627 A1</a>	UNIV PIERRE ET MARIE CURIE PARIS 6	System for sensory substitution by asynchronous tactile stimulation
<a href="#">WO 2018130552 A1</a>	DESYNCRA TECH LIMITED	Extended bandwidth hearing aid with dynamically adjustable sampling rate for power optimized deployment of coordinated reset (cr) neuromodulation for the treatment of subjective tonal tinnitus
<a href="#">WO 2018130287 A1</a>	SONOVA AG	Hearing device with acoustic shock control and method for acoustic shock control in a hearing device
<a href="#">WO 2018158753 A1</a>	SYMBIOSIS INTERNATIONAL UNIV	System and method enabling an interactive wearable as an educational supplement for hearing impaired individuals
<a href="#">WO 2018127291 A1</a>	SONOVA AG	Binaural hearing system
<a href="#">WO 2018149999 A1</a>	YUMI TECH	Terminal for collecting a user's satisfaction feedback, collection system comprising the terminal, and method for collecting a user's satisfaction feedback using the terminal
<a href="#">WO 2018160503 A1</a>	MICROSOFT TECHNOLOGY LICENSING LLC	Automated real time interpreter service
<a href="#">WO 2018120751 A1</a>	HUAWEI TECH CO LTD	Position adjusting method and terminal
<a href="#">WO 2018156475 A1</a>	COHEN DOUGLAS JAY	Refreshable braille display
<a href="#">WO 2018144732 A1</a>	THE TRUSTEES OF INDIANA UNIV	Cochlear implant
<a href="#">WO 2018156867 A1</a>	MED EL ELEKTROMEDIZINISCHE GERAETE GMBH	Middle ear implant coupler for mechanical cochlea stimulation via the round window
<a href="#">WO 2018140922 A1</a>	CHARI VENKATESH	Tactile display
<a href="#">WO 2018120013 A1</a>	NOKIA TECHNOLOGIES OY	Artificial neural network
<a href="#">WO 2018127910 A1</a>	ARAZIM MOBILE LTD	A tactile computing device
<a href="#">WO 2018118249 A1</a>	MASTERCARD INTERNATIONAL INC	Amount confirmation for visually impaired users
<a href="#">WO 2018132863 A1</a>	ALKIRA SOFTWARE HOLDINGS PTY LTD	Facilitated user interaction

[...ver más](#)

## AYUDA A LA MOVILIDAD

### Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2018122106 A1</a>	ETH ZUERICH	Soft wearable muscle assisting device
<a href="#">WO 2018165399 A1</a>	EKSO BIONICS INC	Devices for the support and balance of human exoskeletons
<a href="#">WO 2018160093 A1</a>	EVDOKIMOV VLADIMIR VLADISLAVOVICH	Assistive device for visually impaired people
<a href="#">WO 2018163084 A1</a>	SPIN DEV SP Z O O	A stair-climbing device for a wheelchair, a wheelchair suitable for installing such a stair-climbing device and a wheelchair equipped with such a stair-climbing device
<a href="#">WO 2018114328 A1</a>	MALLISHO AMJAD	An apparatus for transporting a patient
<a href="#">WO 2018147981 A1</a>	PARKER HANNIFIN CORP	Legged mobility exoskeleton device with enhanced actuator mechanism employing magnetic coupling
<a href="#">WO 2018165451 A1</a>	OBMA PADRAIC	A method for identifying human joint characteristics
<a href="#">WO 2018122331 A1</a>	SAFRAN ELECTRONICS & DEFENSE	Exoskeleton sub-assembly and exoskeleton structure including such a sub-assembly
<a href="#">WO 2018132192 A1</a>	PARKER HANNIFIN CORP	Legged mobility exoskeleton device with enhanced adjustment mechanisms
<a href="#">WO 2018147751 A1</a>	POLSKA BIONIKA SP Z O O	Passive exoskeleton of a knee joint
<a href="#">WO 2018159731 A1</a>	JAPAN HEALTHCARE INC	Gait analyzing system
<a href="#">WO 2018165261 A1</a>	EKSO BIONICS INC	Actuator devices for human exoskeleton joints
<a href="#">WO 2018154253 A1</a>	ROBOTIQUES 3 DIMENSIONS	Improved exoskeleton for assisting horizontal efforts
<a href="#">WO 2018132030 A1</a>	GUSKOV ANDREY NIKOLAEVICH	Exoskeleton
<a href="#">WO 2018144937 A1</a>	OTHER LAB LLC	System and method for user intent recognition
<a href="#">WO 2018158706 A1</a>	LIUTI PAOLO	Electromechanical auxiliary equipment for the lifting and guided displacement of loads
<a href="#">WO 2018156549 A1</a>	BRATHWAITE HALEY	Personal navigation system
<a href="#">WO 2018122332 A2</a>	SAFRAN ELECTRONICS & DEFENSE	Linking device for an exoskeleton structure, facilitating the carrying of loads while walking or running
<a href="#">WO 2018147506 A1</a>	CHO HYEON HONG	Robot dog for visually impaired
<a href="#">WO 2018147982 A1</a>	PARKER HANNIFIN CORP	Legged mobility exoskeleton device with enhanced actuator mechanism employing magnetic/electrical coupling
<a href="#">WO 2018151582 A1</a>	PEOPLIAN CO LTD	Wheelchair driving apparatus using smartphone body motions
<a href="#">WO 2018136367 A1</a>	BLIND INSITES LLC	Devices, systems, and methods for navigation and usage guidance in a navigable space using wireless communication
<a href="#">WO 2018130784 A1</a>	WANDERCRAFT	Method for moving an exoskeleton
<a href="#">WO 2018105470 A1</a>	YAMAMOTO KEIJIROU	Actuator device and joint movement assisting device
<a href="#">WO 2018119586 A1</a>	CLOUDEMINDS SHENZHEN ROBOTICS SYSTEMS CO LTD	Blind guiding method and apparatus, and blind guiding device
<a href="#">WO 2018124892 A1</a>	CASES JIMENEZ PEDRO DANIEL	Guide cane for the blind
<a href="#">WO 2018116476 A1</a>	FUJITSU LTD	Information processing device, information processing method, and information processing program
<a href="#">WO 2018122886 A1</a>	SIGNO MOTUS S R L	Exoskeleton equipped with electro-or magneto-rheological fluid type semi-active joints"
<a href="#">WO 2018118004 A1</a>	INTEL CORP	Wearable assistive jamming apparatus and related methods

[...ver más](#)

## TELEASISTENCIA SANITARIA

### Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO 2018140617 A1</a>	CARDIAC PACEMAKERS INC	Intra-body device communication with redundant message transmission
<a href="#">WO 2018165868 A1</a>	SHENZHEN ZNV TECH CO LTD	Monitoring method and monitoring apparatus
<a href="#">WO 2018122735 A1</a>	LEANPASSION SP Z O O	Apparatus for mental status diagnosis of individuals and groups of people
<a href="#">WO 2018156970 A1</a>	FLIR SYSTEMS	Real-time detection of periodic motion systems and methods
<a href="#">WO 2018152550 A1</a>	PENEXA LLC	System and method for managing treatment plans
<a href="#">WO 2018163023 A1</a>	BSH HAUSGERAETE GMBH	Cooker hood and video surveillance method based on cooker hood
<a href="#">WO 2018141598 A1</a>	KONINKLIJKE PHILIPS NV	System and method for facilitating configuration modifications for a patient interface computer system based on risk of readmission of a patient
<a href="#">WO 2018153979 A1</a>	KONINKLIJKE PHILIPS NV	Remotely controlled ultrasonic imaging system
<a href="#">WO 2018120640 A1</a>	SHENZHEN BENEVOLENCE MEDICAL SCI&TECH CO LTD	Sleep monitoring system for aged people
<a href="#">WO 2018124376 A1</a>	LEE DONGHOON	Core exercise equipment system interworking with smart device
<a href="#">WO 2018154401 A1</a>	MEDICORTEX FINLAND OY	Non-invasive brain injury diagnostic device
<a href="#">WO 2018156071 A1</a>	NEXT STEP DYNAMICS AB	Method and apparatus for health prediction by analyzing body behaviour pattern
<a href="#">WO 2018131789 A1</a>	HAIL CO LTD	Home social robot system for recognizing and sharing everyday activity information by analyzing various sensor data including life noise by using synthetic sensor and situation recognizer
<a href="#">WO 2018139893 A1</a>	CHANG KWANGYOUNG	Method for sharing risk status of user using timer and apparatus therefor
<a href="#">WO 2018130833 A1</a>	S & E CARETRADE	Monitoring system and method
<a href="#">WO 2018150725 A1</a>	PANASONIC IP MAN CO LTD	Dementia information output system and control program
<a href="#">WO 2018132515 A1</a>	DRAWBRIDGE HEALTH INC	Devices, systems, and methods for sample collection
<a href="#">WO 2018152707 A1</a>	SHENZHEN QIANHAI ZOCOM INFORMATION TECH CO LTD	Elderly person nursing robot and control method therefor
<a href="#">WO 2018114035 A1</a>	DIEHL METERING GMBH	Method and apparatus for monitoring the activity of at least one person in an infrastructure unit, and measuring device
<a href="#">WO 2018116920 A1</a>	NEC CORP	Remote management system, control device, server, method, and recording medium
<a href="#">WO 2018146682 A1</a>	GYNISUS LTD	A medical monitoring system and method
<a href="#">WO 2018119239 A1</a>	CERCACOR LABORATORIES INC	Methods and devices for detecting intensity of light with translucent detector
<a href="#">WO 2018120642 A1</a>	SHENZHEN BENEVOLENCE MEDICAL SCI&TECH CO LTD	Polysomnography system for patients
<a href="#">WO 2018135316 A1</a>	KONICA MINOLTA INC	Nurse call system
<a href="#">WO 2018110624 A1</a>	AOF CO LTD	Fall analysis system and analysis method
<a href="#">WO 2018135317 A1</a>	KONICA MINOLTA INC	Assistance method and assistance system
<a href="#">WO 2018135050 A1</a>	SHARP KK	Monitoring device
<a href="#">WO 2018132352 A1</a>	MAYO FOUNDATION FOR MEDICAL EDUCATION AND RES	Blood pressure measurement techniques and devices
<a href="#">WO 2018136805 A1</a>	UNIV NEW YORK	System, method and computer-accessible medium for ultrasound analysis
<a href="#">WO 2018133074 A1</a>	SICHUAN GOLDEN RIDGE INTELLIGENCE SCIENCE & TECH CO LTD	Intelligent wheelchair system based on big data and artificial intelligence

<a href="#">WO 2018110295 A1</a>	KONICA MINOLTA INC	Care plan output apparatus, care plan output method and care plan output system, and person-to-be-monitored monitoring system
<a href="#">WO 2018125329 A1</a>	UNIV COLUMBIA	Systems and methods for ultrasound modulation of neurons

[..ver más](#)

## OTRAS REFERENCIAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
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<a href="#">WO 2018158000 A1</a>	KNORR BREMSE GES MIT BESCHRAENKTER HAFTUNG	Sliding step assembly for a motor vehicle or for a rail vehicle
<a href="#">WO 2018162193 A1</a>	SENSATRONIC GMBH	Method and device for measuring a substance concentration in a gaseous medium by means of absorption spectroscopy
<a href="#">WO 2018163141 A2</a>	UNIV CATOLICA SANTA MARIA LA ANTIGUA	Smart umbrella for the visually impaired
<a href="#">WO 2018138350 A1</a>	ZIMMERLI CHRISTIAN	System and method for ascertaining at least one frequency of an auditory perception or a weakening of the auditory perception of a person at said frequency
<a href="#">WO 2018109240 A1</a>	TALLERES AGA S A	Safety lock
<a href="#">WO 2018122518 A1</a>	COMMISSARIAT A LENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	Iterative process for calibrating a direct neural interface
<a href="#">WO 2018142603 A1</a>	MITSUBISHI ELECTRIC CORP	Elevator control device and control method
<a href="#">WO 2018156875 A1</a>	EBNER TODD RENE	Nutrition management and kitchen appliance
<a href="#">WO 2018118687 A1</a>	ONTHEMUV INC	Seated treadmill and method of use
<a href="#">WO 2018140531 A1</a>	UNIV CALIFORNIA	Accessing spinal network to enable respiratory function
<a href="#">WO 2018117918 A1</a>	ALZHRANI MOHAMMAD OTHMAN FARHA	Smart prayer mat with autonomous direction towards the muslim prayer direction (qibla)

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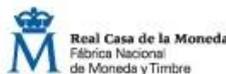
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Los ITPs\*\* de la OEPM detectaron solicitudes de patente relevantes cuando estábamos a mitad del proyecto y gracias a ello pudimos reconducir nuestra investigación.



Gracias a los ITPs\*\* de la OEPM hemos podido decidir la mejor forma de protección de nuestros resultados de I+D y redactar adecuadamente nuestras solicitudes de patente.



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