

Boletín VT

REDES DE SENSORES INALÁMBRICAS

36

4.º trimestre 2018

Vigilancia Tecnológica

Desde su aparición, los campos de aplicación de las redes de sensores inalámbricos se han ido ampliando de forma constante. La posibilidad de crear extensas plataformas de gestión integrada para la monitorización, captura de datos, y control remoto y en tiempo real mediante estas redes sensoriales, ha proporcionado una poderosa herramienta para el desarrollo de aplicaciones y servicios en sectores económicos tan diversos como el agrícola, el industrial o el de la administración pública.

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 algunas de las aplicaciones más relevantes abordadas por las redes de sensores

inalámbricas, tales como: su uso en entornos agrícolas (gestión de cultivos, plagas, invernaderos, regadíos), su uso en entornos urbanos o públicos (seguridad ciudadana, infraestructuras, gestión de información medioambiental, polución, residuos) o su uso para la detección y gestión de incendios.

De este modo, el boletín, de periodicidad trimestral, recogerá las publicaciones más recientes de solicitudes internacionales de patente (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:

- Redes de sensores para entornos agrícolas
- Redes de sensores para entornos urbanos o públicos
- Redes de sensores para detectar incendios
- Otras referencias

NIPO: 116-19-015-9

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.

REDES DE SENSORES PARA ENTORNOS AGRÍCOLAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2018178521 A1	VISIO GREEN AGRICULTURE S A S	System, method and kit for collecting and transmitting agricultural crop management data
WO 2018181041 A1	NEC CORP	Field management device, field management method and computer-readable recording medium
WO 2018188034 A1	JIUZUNCHENG NETWORK TECH SHENZHEN CO LTD	Intelligent-type plant care system and method based on mobile terminal
WO 2018197778 A1	LAUZANNE PHILIPPINE	Device for monitoring the state of health of an equine
WO 2018203811 A1	AALOE AB	Agricultural monitoring system and method
WO 2018169398 A1	AMUSCA B V	Breeding system for crawling insects
WO 2018188033 A1	JIUZUNCHENG NETWORK TECH SHENZHEN CO LTD	Intelligent-type plant care system and method based on mobile terminal
WO 2018220159 A1	CNH IND BELGIUM NV	Ground bearing capacity
WO 2018162699 A1	CNH IND BELGIUM NV	Monitoring system for an agricultural harvester and agricultural harvester
WO 2018188030 A1	JIUZUNCHENG NETWORK TECH SHENZHEN CO LTD	Intelligent-type plant care system and method
WO 2018182393 A1	CASTRO ROQUENI FRANCISCO ALBERTO	System and method for measuring soil fertility and water quality
WO 2019007877 A1	CNH IND BELGIUM NV	Crop discharge control for a forage harvester
WO 2018172114 A1	INL INT IBERIAN NANOTECHNOLOGY LABORATORY	A monitoring device, a system and a method for monitoring a status of fruits
WO 2018171876 A1	SOIL STEAM INT AS	System and method for processing soil
WO 2018204400 A1	CENTAUR ANALYTICS INC	Systems and methods for post-harvest crop quality and pest management
WO 2018195995 A1	SHENZHEN HIGHFENG TECH CO LTD	Multi-unit communication control based intelligent lighting control system and control method
WO 2018202405 A1	ARCELIK AS	A plant growing cabinet in which turf humidity is controlled
WO 2018222875 A1	VALMONT INDUSTRIES	System and method for irrigation management using machine learning workflows
WO 2018173043 A1	BEN SHALOM ZVI	System and method of fluid dispensing
WO 2018203973 A1	EAVISION CORP	Detecting and following terrain height autonomously along a flight path
WO 2018203692 A2	MAPLE TECH CO LTD	Culture vessel using iot-based led and sensor
WO 2018217170 A1	REMOTE GRID PTE LTD	System, method and apparatus for management of agricultural resource
WO 2018211307 A1	LABORATORI FABRICI S R L	Air purifier

WO 2018217639 A1	DOW AGROSCIENCES LLC	Selective detection of bed bug
WO 2018184014 A1	THE BEE CORP	Communication and control systems and methods for monitoring information about a plurality of beehives
WO 2018202241 A1	ADVALIGNO GMBH	Device for the measurement-based acquisition of forestry data and vitality parameters on living trees
WO 2018168564 A1	NILEWORKS INC	Drone for measuring water depth of field
WO 2018213439 A1	CNH IND AMERICA LLC	Feeder and header positioning method
WO 2018216351 A1	BOSCH CORP	Wireless communication device, wireless communication method, and wireless communication system
WO 2018189293 A1	BAYER AG	Value added pest control system with smart learning
WO 2018194464 A1	FARMOTE LTD	Products and processes for measuring the surface profile of a crop or pasture
WO 2018199737 A1	LEE TUCK LOONG	A detection apparatus
WO 2018204196 A1	PREC PLANTING LLC	Control system for air seeder venting system
WO 2018203337 A1	ARUGGA A I FARMING LTD	Plant treatment systems and methods
WO 2018173045 A1	SUPPLANT LTD	Systems and methods for planning crop irrigation
WO 2018175641 A1	BLUE RIVER TECH INC	Combine harvester including machine feedback control
WO 2018169418 A1	LEVNO LTD	Stock water monitor
WO 2018201204 A1	BULLSEYE AUSTRALIA PTY LTD	Milking system and apparatus used in milking
WO 2018204539 A1	LUMIGROW INC	Lighting system and sensor array for growing plants
WO 2018195065 A1	PURDUE RESEARCH FOUNDATION	Portable plant health analysis system and method
WO 2018170491 A1	BOULIND INC	Spray system with dynamically configurable droplet sizes
WO 2018163135 A2	UNIV TECNOLÓGICA DE PANAMA	Autonomous device for harvesting coffee using a colorimeter
WO 2018206678 A1	CNH IND BELGIUM NV	Improvements in or relating to tractor-baler combinations
WO 2018172947 A1	WALLFARM SRL	Automatic system for control and management of hydroponic and aeroponic cultivation
WO 2018198103 A2	DAIRYMASTER	A method and apparatus for monitoring quality of milk
WO 2018178521 A1	VISIO GREEN AGRICULTURE S A S	System, method and kit for collecting and transmitting agricultural crop management data
WO 2018181041 A1	NEC CORP	Field management device, field management method and computer-readable recording medium
WO 2018188034 A1	JIUZUNCHENG NETWORK TECH SHENZHEN CO LTD	Intelligent-type plant care system and method based on mobile terminal
WO 2018197778 A1	LAUZANNE PHILIPPINE	Device for monitoring the state of health of an equine
WO 2018203811 A1	AALOE AB	Agricultural monitoring system and method

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REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2018178561 A1	ELICHENS	Method for mapping the concentration of an analyte in an environment
WO 2018177766 A1	PHILIPS LIGHTING HOLDING BV	Apparatus for a luminaire and a method of operating a luminaire
WO 2018197907 A1	AMSCREEN GROUP LTD	Environment control in electronic apparatus
WO 2018197908 A1	AMSCREEN GROUP LTD	Environment control in electronic apparatus
WO 2018168091 A1	OMRON TATEISI ELECTRONICS CO	Power distribution network monitoring system
WO 2018168078 A1	OMRON TATEISI ELECTRONICS CO	Distribution network monitoring system and distribution network monitoring device
WO 2018208289 A1	INTEL CORP	Two-phase discovery and onboarding of internet of things (iot) devices
WO 2018188765 A1	BARCELONA SUPERCOMPUTING CENTER CENTRO NAC DE SUPERCOMPUTACION	Distributed data structures for sliding window aggregation or similar applications
WO 2018187608 A1	HRL LAB LLC	Method for understanding machine-learning decisions based on camera data
WO 2018182916 A1	INTEL CORP	Configurable context aware sensors in iot smart spaces
WO 2018200541 A1	UNIV CARNEGIE MELLON	Virtual sensor system
WO 2018211049 A1	ECO LOGIC SENSE SAS	Sensor for measuring atmospheric particle concentration
WO 2018170155 A1	UNIV RUTGERS	Method and system for dynamically improving the performance of security screening
WO 2018183576 A1	NEWTONOID TECH LLC	Fixture
WO 2018204625 A2	INDUSTRIAL IO INC	Device, system, and method for sensor provisioning

[...ver más](#)

REDES DE SENSORES PARA DETECTAR INCENDIOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2018189716 A1	LUG PRINCE & DECKER S R L	Vehicle fire suppression system
WO 2018217268 A1	GOOGLE LLC	Video camera assembly
WO 2018176276 A1	SHENZHEN WING TECH CO LTD	Remote home security monitoring system based on electronic communication
WO 2018187450 A1	CARRIER CORP	Moderate-to-low global warming potential value refrigerant leak detection
WO 2018167380 A1	VANNIER PASCAL	Fire safety device by checking for human presence
WO 2018208291 A1	INTEL CORP	Radio resource scheduling
WO 2018191442 A1	AGERPOINT INC	Forestry management tool for assessing risk of catastrophic tree failure due to weather events
WO 2018165887 A1	SHENZHEN WING TECH CO LTD	Residential intelligent monitoring system based on cloud computing
WO 2018175495 A1	OY HALTON GROUP LTD	Fire safety devices methods and systems
WO 2018216405 A1	KK NIHON MICRONICS	Information collection device, information collection system, and information collection method
WO 2018170187 A1	COEVAC LLC	Automatic smoke/carbon monoxide evacuation method and system
WO 2015148563 A2	OSRAM SYLVANIA INC	Techniques for indoor navigation with hazard avoidance via light-based communication
WO 2018165970 A1	ZHEJIANG MAGTRON INTELLIGENT TECH LIMITED COOPERATION	Leakage current sensor, and apparatus for monitoring leakage current
WO 2018191699 A1	JOHNSON CONTROLS TECH CO	Multi-function thermostat with intelligent supply fan control for maximizing air quality and optimizing energy usage
WO 2018208904 A1	LIFEPOD SOLUTIONS INC	Voice controlled assistance for monitoring adverse events of a user and/or coordinating emergency actions such as caregiver communication
WO 2018191688 A2	JOHNSON CONTROLS TECHNOLOGY COMPANY	Thermostat with exhaust fan control for air quality and humidity control

[..ver más](#)

OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

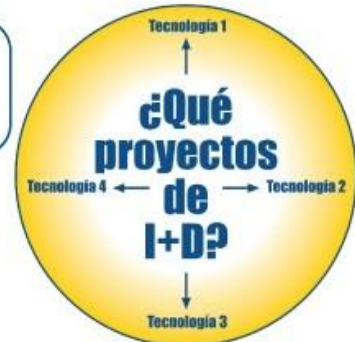
Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2018177972 A1	KONINKLIJKE PHILIPS NV	Optical particle sensor and sensing method
WO 2018177973 A1	PHILIPS LIGHTING HOLDING BV	System and method for counting and localizing occupants using thermal images
WO 2019026453 A1	OMRON TATEISI ELECTRONICS CO	Sensor management unit, method, and program
WO 2018177745 A1	TECHEM ENERGY SERVICES GMBH	Method and apparatus for ascertaining the probability of mould damage and/or damp damage in a building
WO 2018185723 A1	TYCO FIRE & SECURITY GMBH	System and method for identifying and locating sensed events
WO 2018197589 A1	DISRUPTIVE TECH RESEARCH AS	Sensor roaming and link handover
WO 2018217910 A1	SPOT YOU MORE INC	Task monitoring
WO 2018214190 A1	NANJING INST OF GEOGRAPHY & LIMNOLOGY CHINESE ACADEMY OF SCIENCES	Stereoscopic monitoring and data mining system and method for harmful lake cyanobacteria bloom
WO 2018180369 A1	NEC CORP	Sensor network system
WO 2018181535 A1	KDDI CORP	Terminal, system, program, and method enabling estimation of area information using another terminal information
WO 2018217365 A1	MICROSOFT TECHNOLOGY LICENSING LLC	Signal design for diverse data rates
WO 2018215441 A1	KONINKLIJKE PHILIPS NV	A mask-based breathing apparatus and control method
WO 2018177740 A1	TELECOM ITALIA SPA	Configurable wireless device network
WO 2018182392 A1	EXPLOSION MOVIL S DE R L DE C V	System and method for supporting the administration of drinks bars in points of sale
WO 2018187266 A1	OSRAM SYLVANIA INC	Occupancy estimation using nonparametric online change-point detection, and apparatuses, systems, and software for same
WO 2018202499 A1	BSH HAUSGERAETE GMBH	System for monitoring a drying process and method for the operation thereof
WO 2018215220 A1	MILANO POLITECNICO	Wearable device for controlling gaseous pollutants
WO 2018217860 A1	BXB DIGITAL PTY LTD	Systems and methods for quality monitoring of assets
WO 2019009571 A1	MEMSCHIP CO LTD	Smart diaper
WO 2018183311 A1	UOP LLC	Operating slide valves in petrochemical plants or refineries
WO 2018218030 A1	ION GEOPHYSICAL CORP	Modular seismic node
WO 2018183054 A1	GENSCAPE INTANGIBLE HOLDING INC	System and method for monitoring disposal of wastewater in one or more disposal wells
WO 2018184165 A1	ZOU XIA	Distributed cloud service system for flow totalization
WO 2018199371 A1	MAXFOR TECH INC	Sensor node for communicating in sensor network
WO 2018218239 A1	ASHLEIGH IND LLC	Pet training system
WO 2019006411 A1	GYRODATA INCORPORATED	Continuous survey using survey sensors
WO 2018169248 A1	LEE KEUN HO	Underground inclinometer system
WO 2018167569 A1	WLAB LTD	System and method for air monitoring
WO 2018191134 A1	DEFELICE THOMAS PETER	Intelligent systems for weather modification programs
WO 2018200970 A1	AQUAFRESCO INC	Water reuse systems and related methods and apparatuses
WO 2018208671 A1	WALMART APOLLO LLC	Uniquely identifiable customer traffic systems and methods
WO 2018211836 A1	CACH INC	Remote state monitoring system and monitoring method

WO 2018172928 A1	LABORATORI FABRICI SRL	Furniture with air purifier
WO 2018208485 A1	SIEMENS ENERGY INC	Contactless, blade-tip clearance measurement for turbines
WO 2018165424 A1	INOVA LTD	Seismic data acquisition units and related methods
WO 2018170120 A1	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	Systems and methods for detecting and locating unsecured sensors in a network
WO 2018170438 A1	MULTISENSOR SCIENT INC	Scanning ir sensor for gas safety and emissions monitoring
WO 2018183543 A1	UOP LLC	Rotating equipment in a petrochemical plant or refinery
WO 2018187339 A1	GE LIGHTING SOLUTIONS LLC	System and method for presence detection
WO 2018201041 A2	UOP LLC	Remote monitoring of adsorber process units
WO 2018208179 A1	CZACHOR ZBIGNIEW	Measuring system for actual energy consumption of central heating radiators
WO 2018209436 A1	UNIV ALBERTA	Method and system for determining currents in bundled conductors
WO 2018217952 A1	CALIFORNIA INST OF TECHN	Wireless automated animal monitoring system
WO 2018215825 A1	IBM	Adaptive adjustment using sensor data and distributed data
WO 2018170403 A1	WATER CLINIX OF AMERICA INC	Water quality monitoring system and method
WO 2018218457 A1	SHENZHEN HIGHFENG TECH CO LTD	Online detection system based on single-chip microcomputers, and control method therefor
WO 2018200974 A1	MEYER INTELLECTUAL PROPERTIES LTD	Control system for cooking
WO 2018207266 A1	MITSUBISHI ELECTRIC CORP	Wireless sensor aggregation station, wireless sensor device, server device, wireless sensor system, and wireless sensor control method
WO 2018216339 A1	SONY CORP	Information processing device and method for control thereof, and recording medium
WO 2018222704 A2	SAUDI ARABIAN OIL CO	Detecting sub-terranean structures
WO 2018208879 A1	IROBOT CORP	Methods, systems, and devices for mapping, controlling, and displaying device status
WO 2018212780 A1	CONOCOPHILLIPS CO	Non-uniform optimal survey design principles
WO 2018217794 A1	WAUKESHA BEARINGS CORP	Bearing monitoring/analysis system
WO 2018220614 A1	VERSATILE NATURES LTD	Method and apparatus for load handling
WO 2018165755 A1	UNIV ALBERTA	Apparatus and methods for wireless/rfid sensors
WO 2018170017 A1	LUMO BODYTECH INC	System and method for automatic location detection for wearable sensors
WO 2018204342 A1	SYMBOL TECHNOLOGIES LLC	Product status detection system
WO 2018212860 A1	INTEL CORP	Seamless and reliable chain of custody transfer over low power wireless protocol
WO 2018204324 A1	REI INC	Method and system for component wear monitoring
WO 2018194565 A1	HEWLETT PACKARD DEVELOPMENT CO	Monitoring the thermal health of an electronic device
WO 2018175661 A1	SPOONDRIFT TECH INC	Real-time metocean sensor arrays
WO 2018201121 A1	CHERRY LABS INC	Computer vision based monitoring system and method
WO 2018177972 A1	KONINKLIJKE PHILIPS NV	Optical particle sensor and sensing method
WO 2018177973 A1	PHILIPS LIGHTING HOLDING BV	System and method for counting and localizing occupants using thermal images

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Los ITPs** de la OEPM nos han ahorrado horas de revisión bibliográfica para definir el punto de partida de nuestros proyectos de I+D.



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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