

Boletín VT

REDES DE SENSORES INALÁMBRICAS

29

1.º trimestre 2017

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: 088-17-027-2

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.

REDES DE SENSORES PARA ENTORNOS AGRÍCOLAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2017040814	ISCA TECH INC	Systems and methods for classifying flying insects
WO 2017036689	FOND UNIV INUIT TOR VERGATA	Device and method for certifying the life cycle of an organic product
WO 2017044391	THE CLIMATE CORP	Generating probabilistic estimates of rainfall rates from radar reflectivity measurements
WO 2017032986	SENSEYE LTD	Network connected sensors
WO 2017033762	SONY CORP	Farm field management system, farm field management method, and agricultural machine system
WO 2017030437	LELY PATENT NV	Cubicle shed with a cubicle monitoring system
WO 2016210274	BAYER CROPS SCIENCE LP	Method for applying an agrochemical to an agricultural area of interest
WO 2017033761	SONY CORP	Farm field management system, farm field management method, and agricultural machine system
WO 2017033763	SONY CORP	Farm field management system, farm field management method, and agricultural machine system
WO 2017021718	TONICK WATERING LTD	Improved irrigation valve and method of use
WO 2017042789	UNIV TECNOLÓGICA DE PANAMÁ	Harvesting and lawn care robot
WO 2017027677	UNIV CENTRAL FLORIDA RES FOUND INC	Passive insect surveillance sensor device
WO 2017039520	SPACEMETRIC AB	Smart downloading of sensing data in remote sensing systems
WO 2017033057	NETAFIM LTD	Method and apparatus for fertigation with wastewater
WO 2017034737	QUALCOMM INC	Mitigating constrained backhaul availability between a radio access network (ran) and core network
WO 2017035152	PIONEER HI-BRED INT INC	Methods and systems for seed treatment applications
WO 2017002295	DENSO CORP	Control device and agricultural greenhouse
WO 2017006593	NEC SOLUTION INNOVATORS LTD	Sensor monitoring device, sensor monitoring method, and program
WO 2017015414	ZITO JR ARTHUR J	Responsive dispersion from compartment in aqueous solution
WO 2017027828	GARRITY POWER SERVICES LLC	Tracking sensor
WO 2016201508	COMMW SCIENT IND RES ORG	Soil condition analysis system and process
WO 2016208415	SONY CORP	Inspection apparatus, sensing apparatus, sensitivity control apparatus, inspection method, and program
WO 2017001717	CALLEJERO ANDRES CARLOS	Method and system for management, monitoring and traceability for extensive livestock farming
WO 2017002296	DENSO CORP	Control device and agricultural greenhouse
WO 2017002294	DENSO CORP	Control device and agricultural greenhouse
WO 2017015118	IRRIGREEN INC	Irrigation system
WO 2016209159	SUNDIN MARIA	Method and system for hoof analysis
WO 2017008668	XU GUOLAN	Position-adjustable drip irrigation device for garden use
WO 2017005200	XU GUOLAN	Intelligent depth-adjustable drip irrigation apparatus for plantlets in gardens
WO 2017011595	AGERPOINT INC	Modular systems and methods for determining crop yields with high resolution geo-referenced sensors
WO 2017011574	BASF CORP	Pest control and/or detection system with conductive bait matrix
WO 2017015389	THE TEXAS A&M UNIV SYSTEM	Method and system for reduction of irrigation runoff

WO 201700022	DITTERICH CAILE	Agricultural product quality monitoring
WO 2017020060	ECOLOGICAL HORIZONS PTY LTD	Automated device for delivering a pharmaceutical to an animal
WO 2016207900	CORSICA INNOVATIONS INC	Plant growing device and method
WO 2017004074	PREC PLANTING LLC	Systems and methods for image capture and analysis of agricultural fields

[...ver más](#)

REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2017037381	KERLINK	Modular base station architecture for wireless sensor network
WO 2017042524	TOSHIBA RES EUROPE LTD	Methods and systems for communicating information to a user
WO 2017042523	TOSHIBA RES EUROPE LTD	Self-evolving wireless backhaul
WO 2017035663	MIOVISION TECH INCORPORATED	System and method for detecting and tracking objects
WO 2017042672	ORIENT NEW MEDIA LTD	Navigate, track, and position mobile devices in gps-denied or gps-inaccurate areas with automatic map generation
WO 2017048892	CUBIC CORP	Transit vehicle sensor system
WO 2016205632	BERKELEY SPRINGS INSTR LLC	Transducer mounting apparatus
WO 2016209317	DELL PRODUCTS LP	One-click commissioning and push updates to distributed, large-scale information handling system
WO 2017004667	THE ACTIVE REACTOR COMPANY PTY LTD	Apparatus and method for monitoring performance of street lights
WO 2016187640	SIMPLE COLLECTIVE PTY LTD	Playful urban systems
WO 2017007959	CALIFORNIA INST OF TECHN	Maintenance self-diagnosis and guide for a self-contained wastewater treatment system
WO 2017003302	ENCOUNTER SOLUTIONS LTD	Data collection network and data collection device
WO 2017008090	UNIV OF SOUTH AFRICA	Electronic controller for household energy control based on timing and tariff data

[...ver más](#)

REDES DE SENSORES PARA DETECTAR INCENDIOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2017048811	COOPER TECHNOLOGIES CO	Light fixture as an access point in a communication network
WO 2017039626	ABB TECHNOLOGY LTD	Emergency lighting, evacuation, and rescue routing with power over-ethernet
WO 2017044947	LERMANN JONATHAN	System and apparatus for sensing temperature to prevent electrical fires
WO 2016202350	IBRAHEM MAHMOUD NASHAAT MOHAMED	Anti-gas fires
WO 2017034876	GOOGLE INC	Integrated antenna system and related component management for a smart thermostat
WO 2017003931	BROWN GREGORY A M	Light fixtures, systems, and methods for operating and/or controlling light fixtures
WO 2016203607	HOCHIKI CO	Fire alarm system and testing method therefor
WO 2017025731	THE TECH PARTNERSHIP PLC	System for the monitoring of a previously travelled pathway

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OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2017029635	UNIV KING ABDULLAH SCI & TECH	Robust node estimation and topology discovery for large-scale networks
WO 2017030959	CREE INC	Lighting fixture sensor network
WO 2017040940	CONVIDA WIRELESS LLC	Improved block transfer operation in coap protocol
WO 2017034071	SEJU ENG CO LTD	Gas detector and re-calibration method thereof
WO 2016207720	CGG SERVICES SA	Gun position calibration method
WO 2017005883	UNIV PIERRE ET MARIE CURIE (PARIS 6)	Method of simulating the operation of an electronic circuit and program
WO 2017028205	HUAWEI TECH CO LTD	Anchor master node management method and node
WO 2017031025	GOJO IND INC	Wireless sensor network
WO 2017042782	UNIV TECNOLOGICA DE PANAMÁ	Automatized fishing rod
WO 2017043546	MURATA MANUFACTURING CO	Wireless sensor
WO 2017044917	HILLSIDE EQUITY INC	Apparatus and system for remote sensing, monitoring, analysis and alerting of environmental attributes
WO 2017007990	CONVIDA WIRELESS LLC	M2m clustering management
WO 2017040727	WESTERNGECO LLC	Electromagnetic wave pulse synchronization
WO 2017044927	FLUID HANDLING LLC	Combination isolation valve and check valve with integral flow rate, pressure, and/or temperature measurement with wireless power
WO 2016200298	TELEFONAKTIEBO LAGET LM ERICSSON (PUBL)	Method for autonomous operation and maintenance of a sensor network, sensor management system, computer programs and computer program products
WO 2017023957	CONVIDA WIRELESS LLC	Service element host selection
WO 2017031508	WITTHUHN RUSSELL	Electronic wind measurement device
WO 2016203273	SEETRU LTD	Safety valve leak analysis system
WO 2017013608	OPTERNA TECH LTD	Communications system having a plurality of sensors to remotely monitor a living environment
WO 2016203181	M3A	Business management system
WO 2017026515	KK TOSHIBA	Sound collection control device, sound collection system, sound collection control method, and computer program
WO 2017029590	UNIV KING ABDULLAH SCI & TECH	Non-invasive beamforming add-on module
WO 2017007879	ION GEOPHYSICAL CORP	Towed seismic node
WO 2017031623	NOKIA TECHNOLOGIES OY	Apparatus, method and computer program product for medium access control in a wireless sensor network
WO 2017027268	COOPER TECHNOLOGIES CO	Gas sensor housing with micro-resonators
WO 2017015570	ROSEMOUNT INC	Correction of natural gas flow calculations for the effects of water vapor
WO 2017041060	CIVIONICS INC	Wireless sensor module
WO 2016205360	PEEK PROCESS INSIGHTS INC	Effluent control system
WO 2017013760	MITSUBISHI ELECTRIC CORP	Wireless communication device, presence detection system, method, and program
WO 2017018994	HEWLETT- PACKARD DEV COMPANY L P	Sensor communications by vibrations

WO 2017019062	HEWLETT PACKARD ENTPR DEV LP	Protecting a computing device from environmental issues in an enclosure
WO 2016201530	ROOSELVET MOIA AGUIAR FRANKLIN	Remote inspection method for detecting operational conditions of coatings
WO 2016209443	MCAFEE INC	Cognitive protection of critical industrial solutions using iot sensor fusion
WO 2017000133	HUAWEI TECH CO LTD	Resource indication processing method and processing device, access point and station
WO 2017002373	NEC CORP	Surveillance system with fixed camera and temporary cameras
WO 2017013148	PHILIPS LIGHTING HOLDING BV	Reducing peak network loads in wireless sensor networks
WO 2017018726	WAPEUL CO	Sensor signal detecting system and smart plug having same
WO 2017021892	UNIV KING ABDULLAH SCI & TECH	An improved scheduling algorithm for linear networks
WO 2016197251	QUEEN'S UNIV AT KINGSTON	Automated mobile geotechnical mapping
WO 2017004480	FISHER CONTROLS INT LLC	Base station for gathering data from localized sensors
WO 2017012403	ZTE CORP	Sensor and data acquisition system
WO 2017027334	BREWER SCIENCE INC	Environmental sensor system and signal processor
WO 2017011140	WEI QINGJUN	Method and apparatus for an internet of things controller
WO 2016205814	UNIV CALIFORNIA	Gas detection systems and methods using graphene field effect transistors
WO 2017004701	TECH RETIA INC	Device and architecture for low-power networked communication
WO 2016190816	AGENCY SCIENCE TECH & RES	Sensor arrangements and methods of operating a sensor arrangement
WO 2017016888	KONINKLIJKE PHILIPS NV	Laser sensor for particle density detection
WO 2017029635	UNIV KING ABDULLAH SCI & TECH	Robust node estimation and topology discovery for large-scale networks
WO 2017030959	CREE INC	Lighting fixture sensor network

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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.

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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.

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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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