

Boletín VT

REDES DE SENSORES INALÁMBRICAS

28

4.º trimestre 2016

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 2016185188	HOZELOCK LTD	Garden watering controllers
WO 2016190830	ALGAN YAZILIM VE BİLİŞİM MAKİNE ELEKTRONİK HAYVANCILIK	Pulsation monitoring claw
WO 2016196888	THE GSI GROUP LLC	Animal house climate control system and method for operating an air inlet of the animal house using timed inlet control
WO 2016201113	SCANIT TECH INC	Personal airborne particle monitor with quantum dots
WO 2016194507	TOPCON CORP	Wavelength sensor device for plant
WO 2016191893	UNIV CATÓLICA DEL MAULE	Real-time interactive monitoring system for precision agriculture
WO 2016195516	DINGER BARTEL CHRISTIAAN	A device and method of operation
WO 2016189468	AGROMENTUM LTD	Closed loop integrated pest management
WO 2016196616	ELWHA LLC	Systems and methods for selective pollination
WO 2016196552	AFERO INC	System and method for an internet of things (iot) moisture sensor
WO 2016160384	THE CLIMATE CORP	Forecasting national crop yield during the growing season
WO 2016196650	NAT PASTEURIZED EGGS INC	Improved shell egg pasteurization processes
WO 2016186523	C-DAX LTD	Plant matter sensor
WO 2016191825	THE UNIV OF SYDNEY	Automatic target recognition and management system
WO 2016171007	SONY CORP	Inspection device, inspection method, and program
WO 2016176787	INGENIERIA WISECONN S A	System and method for managing water or other type of fluid
WO 2016182138	LINUXIT CO LTD	System for remotely controlling plurality of greenhouse cultivation facilities
WO 2016175094	TOPCON CORP	Sensor device for plants
WO 2016178393	CYBERDYNE INC	Model-animal functional-improvement evaluation apparatus and nerve-cell culturing apparatus
WO 2016178268	HITACHI LTD	Farm field management apparatus, farm field management method, and storage medium
WO 2016162086	HUSQVARNA AB	Simplified interface and operation in a watering system
WO 2016181605	SONY CORP	Management device, individual entity management system, and individual entity search system
WO 2016162085	HUSQVARNA AB	Watering system with adaptive components
WO 2016162654	R J FULLOOD & BLAND LTD	Automated milking
WO 2016181604	SONY CORP	Livestock management system, sensor device, and method for estimating status of livestock
WO 2016158987	ROUTREK NETWORKS INC	Fertigation system, fertigation control server, salts accumulation determination method, and soil ec sensor
WO 2016182906	PRECISION PLANTING LLC	Work layer imaging and analysis for implement monitoring, control and operator feedback
WO 2016168585	UNIV OF GEORGIA RES FOUND INC	Electrochemical sensors and methods for using electrochemical sensors to detect plant pathogen infection
WO 2016162545	CHECKIT LTD	Systems and methods for monitoring food processing and food storage
WO 2016183000	BIOSENSING SYSTEMS LLC	Apparatuses and methods for bio-sensing using unmanned aerial vehicles

WO 2016187112	AIRFUSION INC	Portable apparatus and method for decision support for real time automated multisensor data fusion and analysis
WO 2016182885	SUPRASENSOR TECH LLC	System, apparatus, and method for measuring ion concentration with a standard deviation correction

[...ver más](#)

REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2016189281	OPTOSCI LTD	Gas sensing apparatus
WO 2016147043	GREENSTAR RES AND DEV INDIA PRIVATE LTD	Intelligent multi-functional street lighting network
WO 2016189506	AREA PREFABBRICATI S P A	Seismic monitoring system and method for carrying out the seismic monitoring using said monitoring system
WO 2016178042	NOXTAK TECH VBA	Electrosmog monitoring and evaluating system
WO 2016172251	KESPRY INC	Systems and methods for execution of recovery actions on an unmanned aerial vehicle
WO 2016195329	SAMSUNG ELECTRONICS CO LTD	Device and method for performing communication service
WO 2016156401	WESTIRE TECH LTD	Smart city closed camera photocell and street lamp device
WO 2016189509	AREA PREFABBRICATI S P A	Accelerometric sensor for seismic monitoring of structures
WO 2016156563	PHILIPS LIGHTING HOLDING BV	Precipitation sensing luminaire
WO 2016181043	LYNXPLUS SAS	Facility for monitoring a structure
WO 2016191616	WATERR8 LLC	Apparatus and method for measuring water run time
WO 2016181277	ELECTRICAL GRID MONITORING LTD	A method and system of tethered routers
WO 2016145443	KERZNER DANIEL	Virtual enhancement of security monitoring
WO 2016152612	NEC CORP	Instruction information provision device, method and program
WO 2016197096	MUELLER INT LLC	Distribution system monitoring
WO 2016187602	AQUADATION LLC	Structural foundation monitoring sensor system
WO 2016168791	GEN ELECTRIC	User interfaces for parking zone creation
WO 2016179253	GREENE CHARLES E	Automated system for lighting control
WO 2016150972	PHILIPS LIGHTING HOLDING BV	Method for configuring a network and configuration apparatus.
WO 2016172262	PLACEMETER INC	Systems and methods for processing video data for activity monitoring
WO 2016155844	NEC EUROPE LTD	Method and system for observing a predetermined monitoring area
WO 2016175718	EROĞLU ALI RIZA	Multi-detection system for earthquake and concussion
WO 2016147044	GREENSTAR RES AND DEV INDIA PRIVATE LTD	Infrastructure functions enabled mobile network
WO 2016168792	GEN ELECTRIC	Simulating camera node output for parking policy management system
WO 2016147045	GREENSTAR RES AND DEV INDIA PRIVATE LTD	Virtual presence device

[...ver más](#)

REDES DE SENSORES PARA DETECTAR INCENDIOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2016172086	MSA TECH LLC	Self-contained breathing apparatus with thermal imaging capabilities
WO 2016171965	OSHKOSH CORP	Response vehicle systems and methods
WO 2016191215	GOOGLE INC	Systems and methods of integrating sensor output of a mobile device with a security system
WO 2016186868	GOOGLE INC	Hazard detector architecture facilitating compact form factor and multi-protocol wireless connectivity
WO 2016167736	EHOSTAR UKRAINE LLC	Home security response using biometric and environmental observations
WO 2016191552	STETTER JOSEPH R	Wireless near-field gas sensor system and methods of manufacturing the same
WO 2016154306	CARRIER CORP	System and method for capturing and analyzing multidimensional building information
WO 2016149521	GOOGLE INC	Systems and methods of privacy within a security system
WO 2016190679	KOREA INST OF SCIENCE & TECH INFORMATION	Method for displaying disaster and safety information, and portable device
WO 2016179042	CNRY INC	Systems and methods for smart connection, communication, and power conversion
WO 2016174974	MORITA MIYATA CORP	Fire detection device, automatic fire extinguishing device, and automatic fire extinguishing system
WO 2016160724	GOOGLE INC	Devices and methods for determining and acting upon cumulative exposure of a building occupant to a hazardous substance
WO 2016179045	JOHNSON CONTROLS TECH COMPANY	Mountable touch thermostat using transparent screen technology
WO 2016160722	GOOGLE INC	Configuring a smart home controller
WO 2016180796	VORWERK CO INTERHOLDING	Method for operating a self-propelled cleaning device
WO 2016152915	NEC CORP	Information provision system, information provision method, and program
WO 2016182284	SAMSUNG ELECTRONICS CO LTD	Method and device for providing communication service
WO 2016120662	UNIV CAPE TOWN	An early warning device for detecting and reporting dangerous conditions in a community
WO 2016162880	INDIAN INST OF TECH MADRAS	A novel ultrasonic waveguide technique for distributed sensing and measurements of physical and chemical properties of surrounding media
WO 2016187116	INTELLIGENT DYNAMICS LLC	Localized hazard alert system and method of use

[..ver más](#)

OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2016187090	3M INNOVATIVE PROPERTIES CO	Voltage sensor
WO 2016184508	ABB TECHNOLOGY LTD	Handling of alarms having a causal dependency
WO 2016170311	THE TECH PARTNERSHIP PLC	Gas pipe security device
WO 2016195985	CISCO TECH INC	Network behavior data collection and analytics for anomaly detection
WO 2016196224	REBELLION PHOTONICS INC	Hydrogen sulfide imaging system
WO 2016148940	CISCO TECH INC	Reliable multicast in low-power and lossy networks
WO 2016183025	QUALCOMM INC	Cell selection procedures for machine type communication devices supporting coverage enhancement
WO 2016166747	CORNING OPTICAL COMMUNICATIONS WIRELESS LTD	Optimizing remote antenna unit performance using an management channel
WO 2016191831	FUTURE FIBRE TECH PTY LTD	System and method for measuring in-ground vibration
WO 2016156657	CYBERLIGHTNING OY	Arrangement for implementation of data decentralization for the internet of things platform
WO 2016183127	TYCO FIRE & SECURITY GMBH	Self-powered door and window opening sensor
WO 2016196686	CISCO TECH INC	Policy-driven compliance
WO 2016194235	FUJITSU LTD	Observation system and observation method
WO 2016186973	QUALCOMM INC	Low-cost randomness in wlan chipsets for internet of everything
WO 2016196683	CISCO TECH INC	System for monitoring and managing datacenters
WO 2016157271	NEC CORP	Sensor network system
WO 2016167407	SAMSUNG SDS CO LTD	Encrypted data management method and device
WO 2016183522	THALCHEMY CORP	Neural sensor hub system
WO 2016189607	HITACHI LTD	Computer system and data relay device
WO 2016163893	OCTIO AS	Method and system for measuring subsidence
WO 2016174278	RIAZA CÁRCAMO CARLOS	Antitheft system and method for transported loads
WO 2016151472	RAPALLINI ROMANO	Network device, computer network and method for controlling environments
WO 2016175905	THE CHARLES STARK DRAPER LABORATORY INC	Wireless network for sensor array
WO 2016143546	OMRON TATEISI ELECTRONICS CO	Wireless device and slave control device
WO 2016181398	VAYYAR IMAGING LTD	System, device and methods for imaging of objects using electromagnetic array
WO 2016163907	SIEMENS AG	Monitoring of a mechanical device
WO 2016163906	SIEMENS AG	Monitoring of a mechanical device
WO 2016170574	HITACHI LTD	Operation management system and operation management method
WO 2016188359	SHANGHAI HONGYAN RETURNABLE TRANSIT PACKAGINGS CO	Delivery method and system of recyclable logistics appliances
WO 2016163778	LG ELECTRONICS INC	Method and device for transmitting/receiving information related to barometer in wireless communication system
WO 2016176596	SCHLUMBERGER TECHNOLOGY CORP	Multiphase flow meters and related methods
WO 2016175430	KOREA ADVANCED INST OF SCIENCE	Operator for spatial query and energy efficient query processing in wireless sensor network database system

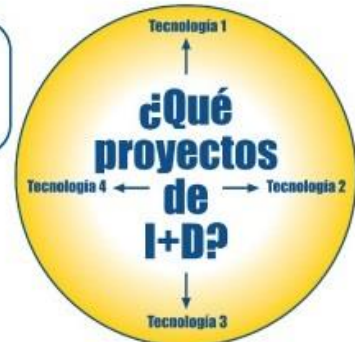
WO 2016178475	DONG KANG M-TECH CO LTD	Underwater temperature collection device
WO 2016191001	QUALCOMM INC	Apparatus-assisted sensor data collection
WO 2016147267	FUJITSU LTD	Control device, control program, and sensor node
WO 2016171941	HONEYWELL INT INC	Method and apparatus for level measurements or other measurements using time of flight calculations and estimates of false echoes
WO 2016191530	UNIV OF HOUSTON SYSTEM	Systems and methods for scour monitoring with fiber optic sensors
WO 2016153829	INTEL CORP	Ad-hoc wireless communication network including wearable input/output transducers
WO 2016168787	TULIP INTERFACES INC	Monitoring tool usage
WO 2016149551	AMPHENOL THERMOMETRICS INC	Intelligent thermal validation & monitoring system with asset management and self diagnosis capabilities
WO 2016163808	SAMSUNG ELECTRONICS CO LTD	Apparatus and method for routing data packet to user equipment in lte-wlan aggregation system
WO 2016166594	FAZ TECH LTD	Remotely adapted virtual sensor optimization system and method
WO 2016191711	AMSTED RAIL CO INC	System and method for building and managing a train consist
WO 2016149787	COGNITIVE SYSTEMS CORP	Analyzing wireless network performance
WO 2016156656	CYBERLIGHTNING OY	Arrangement for implementation of scalable the internet of things platform
WO 2016161012	AFERO INC	Apparatus and method for intermediary device data collection
WO 2016176328	EMERSON CLIMATE TECH INC	Compressor having oil-level sensing system
WO 2016181170	CAMBRIDGE SENSOR INNOVATION LTD (FORMERLY CAMBRIDGE SENSOR TECH LTD)	Methods and systems
WO 2016139503	CGG SERVICES SA	System and method for coupling a seismic sensor to the ground
WO 2016144972	MICROMEM APPLIED SENSOR TECH INC	Cement integrity sensors and methods of manufacture and use thereof
WO 2016187090	3M INNOVATIVE PROPERTIES CO	Voltage sensor
WO 2016184508	ABB TECHNOLOGY LTD	Handling of alarms having a causal dependency

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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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