Boletín VT

REDES DE SENSORES INALÁMBRICAS

25

1.er trimestre 2016

Vigilancia Tecnológica

Desde su aparición, los campos de aplicación de las redes de sensores inalámbricas 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: 073-15-019-2

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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
WO 2016032787	3M INNOVATIVE PROPERTIES CO	Magneto-mechanical resonator sensor with pre-disposed mass
WO 2016033029	3M INNOVATIVE PROPERTIES CO	Magneto-mechanical resonator sensor with mass distribution channel
WO 2016018162	CALF SMART LTD	A feed apparatus and system
WO 2016026052	ZHANG GARY	Spraying monitoring system
WO 2015187109	ALGAN YAZILIM VE BİLİŞİM MAKİNE ELEKTRONİK HAYVANCILIK TİC	Mastitis warning claw
WO 2015184479	MKW ELECTRONICS GMBH	Data network for monitoring animals
WO 2016033240	WATER SYSTEMS INC	Environmental services platform
WO 2016030875	PETPACE LTD	Animal of equidae family band or collar for health & vital signs monitoring, alert and diagnosis
WO 2015193822	CASELLA MACCHINE AGRICOLE S R L	Method and device for measuring vegetation cover on farmland
WO 2016023716	WEBBER SIMON	Animal waste collection
WO 2016025517	BOSTON CONSULTING GROUP INC	Methods and systems for managing animals
WO 2016011391	ELVERUD KIM EDWARD	Resistive heater
WO 2016028329	SUNCREST USA INC	Interlocking raft for deepwater culture hydroponics
WO 2016020270	PASTEUR INSTITUT	Method and device for monitoring detection of odors by moving animals or by moving apparatus in turbulent flows
WO 2015190990	VÄDERSTAD VERKEN AB	Agricultural implement having frame sections moveable relative each other and method of determining mutual position of frame sections
WO 2016026056	VANDRICO SOLUTIONS INC	Method and system for providing situational awareness using a wearable device
WO 2016028219	IND RAT SOLUTIONS PTE LTD	Trap and method of operating the same
WO 2015194752	KOREA INST GEOSCIENCE & MINERA	Monitoring probe for observing underground water
WO 2016024654	EULJI UNIVERSITY INDUSTRY ACADEMY COOPERATION FOUNDATION	Heavy snow damage prevention system for vinyl greenhouse
WO 2015191556	AGBOTIC INC	Robotic gantry bridge for farming
WO 2016019417	COLD CHAIN PARTNERS PTY LTD	Wireless monitoring system
WO 2016024120	DELTA T DEVICES LTD	Matric potential sensor

WO 2015188251	PREC HAWK INC	Method and system for processing image data from unmanned aerial vehicles
WO 2015199629	DOKUZ EYLÜL ÜNIVERSITESI REKTÖRLÜGÜ	Solar powered three-axis mobile agricultural automation
WO 2015193327	LEIB JÜRGEN	Monitoring device for animals
WO 2016014440	BONGE NICHOLAS JAY	Wireless animal training, monitoring and remote control system

...ver más

REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2016037346	MICROSOFT TECHNOLOGY LICENSING LLC	Measuring and diagnosing noise in urban environment
WO 2016037195	AIRA TECH CORP	Media streaming methods, apparatus and systems
WO 2016032186	SAMSUNG ELECTRONICS CO LTD	Temperature control method and apparatus
WO 2015184264	HUBBELL INC	Solid state lighting fixtures with integrated wireless control
WO 2016024220	CONSULTING & TECHNOLOGIES S L F A	Methods and systems to enable presence related services
WO 2016026073	QDTVENTURE CAPITAL SHENZHEN TECHNOLOGY CO LTD	City cloud-based third-generation intelligent street lamp and interconnection and interworking control system
WO 2016031976	IZAX CO LTD	Support equipment for disasters and other extraordinary events
WO 2016000325	ZTE CORP	Street lamp control method and apparatus
WO 2015195728	UNIV DREXEL	Self-contained rapid modal testing system for highway bridges
WO 2016013939	TVILIGHT B V	Lighting control system for routing of messages between a number of lighting nodes forming a wireless multi-node network and method therefor
WO 2016014754	QUALCOMM INC	Determination of environment characteristics from mobile device-based sensor measurements
WO 2015195976	BARNARD CHRIS	Application framework for interactive light sensor networks
WO 2016037346	MICROSOFT TECHNOLOGY LICENSING LLC	Measuring and diagnosing noise in urban environment

...ver más

REDES DE SENSORES PARA DETECTAR INCENDIOS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2016036440	GOOGLE INC	Detector unit and sensing chamber therefor with matter retention member and method for making same
WO 2016032920	SEED LABS SP Z O O	Peer-to-peer building automation system without knowledge being required of network topology
WO 2016005805	UNIVERSAL SITE MONITORING UNIT TRUST	Personal hazard detection system with redundant position registration and communication
WO 2016032546	FACTORY MUTUAL INSURANCE COMPANY	Apparatus and method to monitor for fire events and dynamically activate fire sprinklers
WO 2015189572	SICAME UK LTD	Smart cut-out fuse carrier
WO 2016028035	YOON SEUNG SIK	Intelligent evacuation guidance system and method for providing same
WO 2016011183	GOOGLE INC	Systems and methods for intelligent alarming
WO 2016012673	BAYARD	Module and system for monitoring a water dispensing device, and related water dispensing device
WO 2016030676	ECHOSTAR UK HOLDINGS LTD	In-residence track and alert
WO 2015200796	MP HIGH TECH SOLUTIONS PTY LTD	Apparatus and method for electromagnetic radiation sensing
WO 2016017995	SAMSUNG ELECTRONICS CO LTD	System and method of controlling data transmission of external apparatus connected to gateway
WO 2016025946	ADT US HOLDINGS INC	Using degree of confidence to prevent false security system alarms
WO 2015200547	SMOKE GUARD INC	Deployable, foldable smoke/fire curtain assembly

..ver más

OTRAS REFERENCIAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2016036703	ALIBABA GROUP HOLDING LTD	Cooling control of information technology equipment
WO 2016030228	PGS GEOPHYSICAL AS	Joint estimation of electromagnetic earth responses and ambient noise
WO 2016040152	ON QUARD LLC	Personal security system
WO 2016032685	TRIMBLE NAVIGATION LTD	All-in-one integrated sensing device for machine control
WO 2015187264	ROSEMOUNT INC	Industrial audio noise monitoring system
WO 2015187140	HALLIBURTON ENERGY SERVICES INC	Fracture treatment analysis based on distributed acoustic sensing
WO 2015182416	OMRON TATEISI ELECTRONICS CO	Virtual sensor metadata structure
WO 2016027104	BEVAN HEBA	Sensor systems
WO 2016032897	TRIMBLE NAVIGATION LTD	Earthquake and displacement early warning system
WO 2016006383	ROHM CO LTD	Sensor node communication terminal, host communication terminal, and wireless sensor network system
WO 2016025507	HARPER JOSEPH COLE	System and method for accurately analyzing sensed data
WO 2015191577	EXOSITE LLC	Modularized communication device
WO 2015196196	NIARA INC	System, apparatus and method for managing redundancy elimination in packet storage during observation of data movement
WO 2015193956	FUJITSU LTD	Sensor network system
WO 2016024809	SAMSUNG ELECTRONICS CO LTD	Ambient network sensing and handoff for device optimization in heterogeneous networks
WO 2016025727	VORBECK MATERIALS CORP	Surface applied sensors
WO 2016027722	APLIX IP HOLDINGS CORP	Sensor system and method for controlling sensor system
WO 2016032070	SAMSUNG SDS CO LTD	Near field communication node devices and alarm method for notifying gathering of same
WO 2016028922	IDENTIFLIGHT LLC	Bird or bat detection and identification for wind turbine risk mitigation
WO 2015198425	HITACHI SYSTEMS LTD	Building management device, wide-area management system, data acquisition method, and program
WO 2016014458	CISCO TECH INC	Hierarchical attack detection in a network
WO 2016014661	FISHER CONTROLS INT	Control device with accelerometer for position feedback
WO 2015195645	RENSSELAER POLYTECH INST	Occupancy sensing smart lighting system
WO 2016007244	OOMA INC	Appliance device integration with alarm systems
WO 2016020909	BRONER MOSHE	An apparatus for monitoring liquid transportation vessels and liquid flowing through them
WO 2016023069	COMMW SCIENT IND RES ORG	A method of setting-up a range-based tracking system utilising a tracking coordinate system
WO 2016025802	RENSSELAER POLYTECH INST	Collaborative energy management system
WO 2015196199	NIARA INC	System, apparatus and method for prioritizing the storage of content based on a threat index
WO 2015189161	KONINKL PHILIPS NV	Localization based on network of wireless nodes
WO 2015195205	TRANSVOYANT LLC	Computer-implemented systems and methods of analyzing data in an ad-hoc network for predictive decision-making
WO 2015191324	REYLABS INC	Systems and methods involving mobile indoor energy efficiency exploration, monitoring and/or display aspects
WO 2016024661	UNIV KYUNG HEE UNIV IND COOP	Channel allocation system and channel allocation method in wireless sensor network
WO 2016022730	SHAH YOGENDRA	Occupancy-based service delivery systems and methods
WO 2016022272	TELEDYNE INSTRUMENTS INC	Subsea connector with data collection and communication system and method

WO 2016011040	DELTA T CORP	Integrated thermal comfort control system with shading control
WO 2016014260	HONEYWELL INT INC	Personal wearable system that detects hazardous voltages and indicates direction of the source
WO 2016014280	CISCO TECH INC	Fast network formation after network power restoration
WO 2016022017	BNETWORKS SDN BHD	Universal control platform for wireless sensor networks
WO 2015195532	APACHE CORP	Method for acquiring seismic data
WO 2016022091	NABIH AHMED KAMAL	Interior temperature control
WO 2016003312	GRACHEV ALEXANDR YURYEVICH	Scanning mine gas monitoring system
WO 2015200240	UNIV GEORGIA STATE RES FOUND	Real-time in-situ sub-surface imaging
WO 2016025956	CALIFORNIA INST OF TECHN	Systems and methods for advanced rapid imaging and analysis for earthquakes
WO 2015187916	MAGNUM ENERGY SOLUTIONS LLC	Environmental condition surveillance and methods thereof
WO 2015191444	SICPA SECURITY INKS & SYSTEMS USA INC	An integrity management system to manage and control data between entities in an oil and gas asset supply chain
WO 2016014328	SIKORSKY AIRCRAFT CORP	Coverage optimization for sensor networks
WO 2015195939	WESTERNGECO LLC	System and method to acquire ultra-long offset seismic data for full waveform inversion (fwi) using unmanned marine vehicle (umv)
WO 2016014086	HEWLETT PACKARD DEVELOPMENT CO	Software-defined sensing
WO 2016013925	MIMOS BERHAD	System and method for secure tracking of internet of things based goods in supply chain system
WO 2016022018	BNETWORKS SDN BHD	Universal control system for wireless sensor networks
WO 2016036703	ALIBABA GROUP HOLDING LTD	Cooling control of information technology equipment
WO 2016030228	PGS GEOPHYSICAL AS	Joint estimation of electromagnetic earth responses and ambient noise

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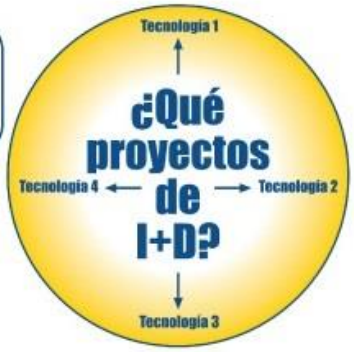

LANZAMIENTO

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

GRIFOLS 75

EJECUCIÓN

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

CSIC

CONCLUSIÓN

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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