

Boletín VT

REDES DE SENSORES INALÁMBRICAS

31

3.^{er} 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 2017096317	STRANO MICHAEL S	Sensor for infrared communication using plant nanobionics
WO 2017140755	HOU KUN MEAN	Operating system for a sensor of a sensor network, and associated sensor
WO 2017099570	PACHECO SANCHEZ JOSÉ ANTONIO	System and method for precision agriculture by means of multispectral and hyperspectral aerial image analysis using unmanned aerial vehicles
WO 2017105172	HERRERA CADENA ISSAC ABRAHAM	Controlling the coupling of a pcb in an aquaponics system
WO 2017124175	WILGER WILFRED H	Controlling application rates in liquid applicators
WO 2017131207	MIZUKUSA YUTAKA	Plant cultivation device and plant cultivation method
WO 2017105695	WOUHAYBI RITA H	Property landscape management apparatus and method
WO 2017125648	PESONEN NADINE	Apparatus for controlling fermentation of natural material
WO 2017132329	AFZAL SAYED AMIN	Sensors for measuring water/solute content and thickness of plant tissue
WO 2017149163	BARSLUND RUNE	A monitoring device for a snap trap
WO 2017129940	TYBURSKI MATTHEW	System and method for earth observation and analysis
WO 2017133719	WÜNSCHE THOMAS	System and method for locally precise application of solids and liquids and mixtures thereof in agriculture and forestry
WO 2017125876	COVI DANIELE	Hyperspectral sensor with ambient light detector
WO 2017125644	PESONEN NADINE	Method, probe and arrangement for monitoring agricultural products
WO 2017120457	BONUTTI PETER M	Fishing system and method to enhance the fishing experience
WO 2017106055	RETTEDAL NICHOLAS P	Animal environmental and physiological monitoring system
WO 2017127913	HELFRICH NEIL CHARLES	Ingestible bolus for animals
WO 2017103922	MAMAN MICHAEL	Autonomous plant growing system
WO 2017144913	MOTTRAM TOBY T F	Milk analyser system and method
WO 2017133625	WONG KA TAT KELVIN	Intelligent courtyard maintenance system and maintenance method thereof
WO 2017124129	COMFORT MICHAEL TONY	Pest control assembly and method
WO 2017145180	SAKTHIVELU K	Method and apparatus for scanning and estimating moisture in soil
WO 2017120196	MARKA SZABOLCS	Apparatus to effect an optical barrier to pests

WO 2017096317	STRANO MICHAEL S	Sensor for infrared communication using plant nanobionics
WO 2017140755	HOU KUN MEAN	Operating system for a sensor of a sensor network, and associated sensor
WO 2017099570	PACHECO SANCHEZ JOSÉ ANTONIO	System and method for precision agriculture by means of multispectral and hyperspectral aerial image analysis using unmanned aerial vehicles
WO 2017105172	HERRERA CADENA ISSAC ABRAHAM	Controlling the coupling of a pcb in an aquaponics system
WO 2017124175	WILGER WILFRED H	Controlling application rates in liquid applicators

[...ver más](#)

REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2017156332	SEEMANN BRIAN K	Home wireless discovery
WO 2017153207	SINITSYN ALEXANDRE GEORGIEVICH	Pollution estimation system
WO 2017165510	AMEIXIEIRA CARLOS EDUARDO BRAGA	Systems and methods for transmission power adaptation in the network of moving things
WO 2017105505	VOIGT TYLER	System and method for inferring or prompting hvac actions based on large data standard deviation based metric
WO 2017136234	FREEMAN WILLIAM T	Motion sensing wi-fi sensor networks for continuous 3d modeling and prediction of facility responses to disturbances
WO 2017096081	EL ALLOUCHE NIHED	Land seismic sensor spread with adjacent multicomponent seismic sensor pairs on average at least twenty meters apart
WO 2017108408	CAICEDO FERNANDEZ DAVID RICARDO	Sensor system.
WO 2017114710	KELLY DECLAN PATRICK	Tracking exposure to air pollution
WO 2017119656	HWANG JIE EUN	Mobile field survey system and method
WO 2017122784	CLAYTON B JUSTIN	Time series data adaptation and sensor fusion systems, methods, and apparatus
WO 2017115665	KEERTHI KISHORE	System and method for a unified connected network
WO 2017119336	NAGATA KAZUMI	Lighting control system, lighting control method, lighting control device, and computer program
WO 2017114582	BOREAN CLAUDIO	Control of a heating/cooling system
WO 2017120315	BAKHISHEV TEYMUR	Systems and methods for using radio frequency signals and sensors to monitor environments
WO 2017117009	OWENS WALTEEN PETER	Led illumination device with single pressure cavity
WO 2017134091	MUIJS REMCO THEODORUS JOHANNES	Presence sensors
WO 2017136960	XU JING	Wireless communication method
WO 2017114846	FRANCIS JONATHAN M	Depth sensing based system for detecting, tracking, estimating, and identifying occupancy in real-time
WO 2017147476	FOSTER SCOTT	Distributed 802.11s mesh network using transformer module hardware for the capture and transmission of data
WO 2017148246	ZHOU HUA	Data configuration method and device
WO 2017150936	HAN MIN	Waste disposal reward system using user terminal, and method therefor
WO 2017111191	JIN YOUNGKYUN	Integrated sensor data management device and method therefor
WO 2017136336	SOKOL ERIC R	Systems and methods for respiratory health management

[...ver más](#)

REDES DE SENSORES PARA DETECTAR INCENDIOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2017137393	TRUSS MICHAEL	A fire detection system using a drone
WO 2017104870	CHOI SUNG-YEOL	Wireless detector-based mobile-linked disaster alert system, and disaster management server included in disaster alert system
WO 2017116173	HAN GA HYUN	Health mask allowing easy movement of chin
WO 2017120452	FARMER NATHANIEL RUDOLF	Wearable mask fit monitor
WO 2017120932	WU XIAOMIN	Information pushing method for use when controlling water spraying and system
WO 2017117674	BUCSA ANDREI	Intelligent smoke sensor with audio-video verification
WO 2017120933	WU XIAOMIN	Method and system for controlling water spraying
WO 2017136563	FICNER ONDREJ	Wall module with multi-pixel passive infrared sensor
WO 2017125715	BROCKLEBANK WILL	Building-specific anomalous event detection and alerting system
WO 2017117964	WANG JIAN	Alarm monitoring method and apparatus
WO 2017120931	WU XIAOMIN	Data transmission method during water spraying and system
WO 2017151984	THOMAS DAVID	Method, apparatus, and computer-readable medium for gathering information
WO 2017146934	JOHNSON KIRK WILLIAM	Using bluetooth beacons to automatically update the location within a portable gas detector's logs
WO 2017125911	BUBLIL DAVID	Gas monitoring system with rfid gas micro sensor
WO 2017127491	REZVANI BABAK	Drone control device
WO 2017135652	LEE SANG MU	Combined lighting and fire detection device
WO 2017116802	CORNWALL MARK K	Gas leak detection and location determination
WO 2017131320	LIM IN TAEK	Social safety network system having portable light for both wireless disaster fire detection and crime prevention
WO 2017140518	ZIEMS BERND	Modular multi-sensor fire- and/or spark detector
WO 2017135495	WON DOO HWAN	Portable oxygen mask
WO 2017139352	JONES KENNETH A II	Wireless gas detection sensor
WO 2017136884	STRHARSKY JUSTIN	Method and system for prediction of a state of an asset
WO 2017147389	HUR SANGHOON	Optical switch with reflection disk in explosion-proof gas detector
WO 2017132740	GOES GASPAROTO ESTHEVAN AUGUSTO	Forest monitoring system and method
WO 2017132347	COLLINGS JOHN	Limited access community surveillance system
WO 2017136517	BOROOJENY SAMIM SAFAEI	Multi-band heat flux gauge
WO 2017135945	KELLY MARK	Dynamic sensing system for wearable safety devices

[..ver más](#)

OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2017105181	DIAZ QUINTANAR JOSÉ ANTONIO	System and method for predicting faults in remotely distributed equipment
WO 2017096489	SLUPSKY STEVEN	Measuring and monitoring a body of granular material
WO 2017099351	KIM JONG TAE	Optical sensor package
WO 2017104287	YAMATO TETSUJI	Data flow control device and data flow control method
WO 2017142840	HABERSTROH MAX C	Systems and methods for scheduling collection of sensor data
WO 2017150621	TAKAJO MAMORU	Network system, terminal, sensor data collection method, and program
WO 2017105847	MONREAL GERARDO A	Circuits and techniques for performing self-test diagnostics in a magnetic field sensor
WO 2017139484	WULFF THOMAS E	Arrangement for, and method of, accurately locating targets in a venue with overhead, sensing network units
WO 2017153784	CLUCAS RICHARD	Data processing devices, data processing units, methods and computer programs for processing telemetry data
WO 2017100909	CHATTHA KARANVIR	Sharing memory between processors in a wireless sensor device
WO 2017099473	RYU JONG-YOUB	Method and apparatus for collecting voc
WO 2017155925	CRONIN JOHN	Cold chain data transfer at handoff
WO 2017155586	WULFF THOMAS E	Arrangement for, and method of, sensing targets with improved performance in a venue
WO 2017107920	SHAH JIGAR JAYESH	Method and system of controlling wind turbines in a wind turbine farm
WO 2017111860	HARRISON EDWARD R	Identification of objects for three-dimensional depth imaging
WO 2017111828	YANG SHAO-WEN	Distributed framework for resilient machine-to-machine system management
WO 2017112147	NOLAN KEITH	Selective measurement reporting from internet of things devices
WO 2017130807	USAMI YOSHIHISA	Information collection system
WO 2017106060	RUSIGNUOLO GIORGIO	Flexible sensor device
WO 2017111824	CHEN YI LIN	Two-dimensional encounter location detection
WO 2017112366	NOLAN MICHAEL	Managing communication congestion for internet of things devices
WO 2017117348	MUKKAMALA HIMAGIRI	Systems and methods for managing industrial assets
WO 2017151208	LAVERY RICHARD J	Arrangement for, and method of, locating product tags by locating users who are operating mobile readers for reading the product tags
WO 2017120227	CHAUDHARI QASIM MAHMOOD	Cross-layer time synchronization method
WO 2017116028	KANG HAK JU	Sensor control system and method
WO 2017123329	SOLOMON DAVID BELU	Novel vessel systems and methods relating thereto
WO 2017139475	ANDERSON HOWARD	Self-configuring sensing device
WO 2017122292	KURIYAMA TOSHIYUKI	Operating state classification device
WO 2017129574	KAAG BJORN CHRISTIAAN WOUTER	Message delay management in lighting control networks.
WO 2017122524	KUMAZAWA MAMORU	Sensor network system, sensing module, server, and association method
WO 2017143202	DEWILDE ABICHE H	Multi-well quartz crystal microbalance mass and viscoelastic sensor
WO 2017149468	CHELI MAURIZIO	System and method for the association of results of analysis performed on biological samples, in particular biological samples subjected to clinical investigations, with pre-analytical variables to which those samples are exposed
WO 2017145430	JUNG CHANBUM	Wireless sensor and method for control of wireless sensor
WO 2017129378	HAEFFNER HUGUES	Detection and quantification of domestic hot water use
WO 2017148705	TROGER HANS-MARTIN	Method for frequency error correction of an oscillator of a sensor node of a wireless sensor network

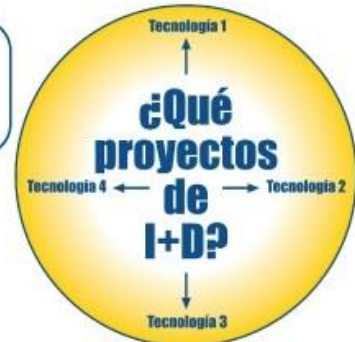
WO 2017112180	ESTRADA GIOVANI	Telemetry adaptation
WO 2017136324	RADJY FARROKH F	Sensing device, sensing device system, and methods for measuring a characteristic of a concrete mixture and for predicting a performance characteristic of a concrete mixture
WO 2017129478	TANCEREL LUDOVIC	Reconfigurable network of sensors
WO 2017132154	RADJY FARROKH F	Systems, apparatus and methods for obtaining measurements concerning the strength and performance of concrete mixtures
WO 2017136473	FARHART HOOTAN	Sensor device and methods
WO 2017122178	NASSAR JOANNA MOHAMMAD	Paper based electronics platform
WO 2017117195	VOLLMER BENJAMIN DAVID	System and method for control of an illumination device
WO 2017112365	NOLAN KEITH	Managing communication congestion for internet of things devices
WO 2017115145	SALE MICHAEL C	Water sensor
WO 2017136661	ROSE MATTHEW W	Low power, high resolution automated meter reading, centralized data collection, and analytics
WO 2017131940	KIM TAEHUN	Sensor network and grid-fixing structure for the sensor network
WO 2017127795	PRIMM MICHAEL R	Asset tracking system for rack-based enclosures
WO 2017105181	DIAZ QUINTANAR JOSÉ ANTONIO	System and method for predicting faults in remotely distributed equipment
WO 2017096489	SLUPSKY STEVEN	Measuring and monitoring a body of granular material

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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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