

Boletín VT

REDES DE SENSORES INALÁMBRICAS

3

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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 forestales.

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 forestales
- Otras referencias

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

WO2010095923 A2	MIMOS BERHAD	Wireless sensor network for precision agriculture, has set of site coordinators collecting and storing data collected/acquired from respective site wireless sensor network to route data to main coordinator
WO2010097689 A1	EIDGENOESSISCHE TECH HOCHSCHULE ZUERICH ETH ZUERICH	System for determining e.g. current condition of plant, and displaying determined condition to owner of plant, has display device for providing optical and/or acoustic display about condition of living object
WO2010093234 A2	MIMOS BHD	Wireless sensor mote for sensor network used in e.g. agriculture industry has energy harvester that generates electrical energy by harvesting ambient or environmental energy such as wind, solar, thermal, vibration, or radio frequency
WO2010085135 A2	MIMOS BHD	Control and profiling device for controlling and profiling field conditions of plants in environment has inference unit manipulating feedback control system to regulate field conditions of plants in environment into revised state
WO2010085134 A3	MIMOS BERHAD	Web-based management system for managing and displaying sensor data in e.g. agricultural industry, has statistical process control module that displays received data/information and additionally displays one or more previously recorded data
WO2010068950 A2	BLANCHARD R N	Apparatus for controlling irrigation events for large irrigation area e.g. residential property, has sensor module to determine rate of change of soil moisture content based on detection of moisture content of soil in irrigation area

[...ver más](#)

REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010099943 A2	LUMENRADIO AB	Wireless network e.g. wireless fidelity hotspot, for wirelessly accessing internet in e.g. urban area, has subnets with respective units, which communicate with each other, where network selects common set of communication parameters
WO2010096663 A2	ACLARA POWER-LINE SYSTEMS INC SMITH R THOMPSON M	Multi-tiered communications network for e.g. controlling gas distribution system, has apparatus obtaining information concerning customers usage of utility, where reports are generated by processing information to perform system management
WO2010093390 A1	CONSOL EDISON CO NEW YORK INC SMARTSYNCH INC	Monitoring System for subterranean utility system, has communication device which is coupled to personal area network to transmit output signal to remote server in response to receiving input signals from interface devices
WO2010070147 A1	DUVAS TECHNOLOGIES LTD	Networked system for mapping environmental factor in atmosphere, used in vehicle e.g. bus, has processing unit coupled to sensor and navigation system, so as to provide location and time of each atmospheric sample

[...ver más](#)

REDES DE SENSORES PARA DETECTAR INCENDIOS FORESTALES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010093260 A1	INST ENERGITEKNIK	Data processing system for estimation of amount or concentration of particulate matter, has sensor system including empirical models, where each of empirical models is trained using empirical data from natural or man made processes
WO2010069079 A1	WOODSCAN IND INC	Portable air horn apparatus for use in seismic surveying and military applications, has microprocessor in communication with switch and automatically loading and executing software of electronic component

[..ver más](#)

OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010101713 A2	BP CORP NORTH AMERICA INC	Monitoring apparatus for monitoring integrity of engineered surface borehole and seal integrity of natural caprock for sequestration of e.g. greenhouse gas from e.g. power plant, has downhole wireline logging tool for interrogating sensors
WO2010086325 A1	UNIV FREIEN BERLIN	Characteristics selecting method for use in wireless sensor network for detecting e.g. climbing over fence by person, involves detecting current event based on selected subset of characteristics in execution phase
WO2010095059 A2	ESTRELLASAT BV	Real-time mobile communication platform for data recording and transmitting systems has control room that facilitates communication via wireless or satellite mesh to support center, central base, multiple sites worldwide
WO2010085736 A1	UNIV MARYLAND BALTIMORE COUNTY	Sensor probe used in sensor system comprises light source and three light sensors around flow-through cell, where light side-scattered by material is collected by light sensors, not absorbed light is collected by third light sensors
WO2010080526 A2	SCHLUMBERGER CANADA LTD WESTERNGECO LLC GECO TECHNOLOGY BV GULBRANSEN E HUSOM V A	Method of determining inline relationship of network nodes of marine seismic data acquisition system, involves determining whether visible master node is the closest master node among master nodes relative to streamer end
WO2010077253 A1	PANDEY R PFEIFER R SYNAPSENSE CORP	Environmental condition control method for use in data center involves using information indicative of modification needed to environmental condition at networked controller
WO2010078350 A1	HOBBS K ROWE T SISSON J	Monitoring method for wellsite, involves wirelessly transmitting wellsite data to remote monitoring station in real-time
WO2010070360 A1	DINKEYS LTD	Personal portable detection device for detecting carbon monoxide, carbon dioxide, smoke and/or natural gas, has signaling units that issue alarm condition if output of each sensor reaches or exceeds predetermined threshold level
WO2010069238 A1	SHENYANG AUTOMATION INST CAS	Communication method for mesh and star topology structure wireless sensor network (MSTN), involves defining network construction element by defining long-period data processing process based on topology and superframe structures
WO2010076072 A1	SIEMENS AG UNIV BERLIN TECH	Mobile network node for use in wireless sensor network for continuously monitoring e.g. students during school excursion, has microcontroller and/or microprocessor connected to data storage, where node monitors presence of network nodes
WO2010067205 A3	CHADHA S	System for automatic monitoring movement of people and asset in and out of e.g. corporate office, has central servers that are connected to readers for receiving location data of tag attached to people and emergency condition