

# Boletín VT

## REDES DE SENSORES INALÁMBRICAS

# 57

1.º trimestre 2024

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 inalámbricos, 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: 116-19-015-9

## 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   |
|----------------------------------|------------------------------------|---|
| <a href="#">WO 2024004486 A1</a> | KUBOTA KK                          | Work vehicle, control method, and control system  |
| <a href="#">WO 2024004633 A1</a> | KUBOTA KK                          | Work device diagnosis system, agricultural machine, agricultural work assistance system   |
| <a href="#">WO 2024004575 A1</a> | KUBOTA KK                          | Work vehicle and method for controlling work vehicle  |
| <a href="#">WO 2024050071 A1</a> | HEARTLAND AG<br>TECH INC           | An irrigation maintenance system for determining irrigation valve and booster pump health   |
| <a href="#">WO 2024005284 A1</a> | JEONG HYUK                         | Automatic honeycomb extracting device   |
| <a href="#">WO 2024007088 A1</a> | CHEMSPEED RES<br>AG                | System for controlling pests on plants  |
| <a href="#">WO 2024003651 A1</a> | PREC PLANTING<br>LLC               | Method and sprayer system for calibrating dosing valves for fluid injection   |
| <a href="#">WO 2024015556 A1</a> | CNH IND<br>AMERICA LLC             | Systems and methods for header height control   |
| <a href="#">WO 2024010656 A1</a> | MINERAL EARTH<br>SCIENCES LLC      | Dynamic lighting for plant imaging  |
| <a href="#">WO 2024006259 A1</a> | CAKEBOXX TECH<br>LLC               | Aquaculture platform  |
| <a href="#">WO 2024004662 A1</a> | KUBOTA KK                          | Assistance system for agricultural machine  |
| <a href="#">WO 2024013584 A1</a> | AGCO INT GMBH                      | Grain cleaning apparatus for a combine harvester  |
| <a href="#">WO 2024004463 A1</a> | KUBOTA KK                          | Travel control system, travel control method, and computer program  |
| <a href="#">WO 2024033361 A1</a> | CEALVET S L U                      | Method and system for assessing livestock welfare based on the analysis of animals vocalization audio signals                       |
| <a href="#">WO 2024008825 A1</a> | PLICORE GMBH                       | Optical measuring device for the spectral analysis of a sample  |
| <a href="#">WO 2024028522 A1</a> | ALTAVITIS TECH S<br>L              | On-the-go precision dosage system for phytosanitary products and liquid fertilisers for the foliar spraying or misting of vineyards |
| <a href="#">WO 2024055084 A1</a> | ZASSO GROUP<br>AG                  | User operated electric weeding system and method for activating a user operated electric weeding system                             |
| <a href="#">WO 2024047092 A1</a> | BASF AGRO<br>TRADEMARKS<br>GMBH    | Method for providing herbicide application data in order to control a herbicide product application device                          |
| <a href="#">WO 2024025585 A1</a> | PALO ALTO RES<br>CT INC            | Controlling cell functioning and motility with the aid of a digital computer  |
| <a href="#">WO 2024031066 A1</a> | LEAFICIENT INC                     | Plant growth system and methods   |
| <a href="#">WO 2024020542 A1</a> | UNIV ILLINOIS                      | Methods to estimate field-level carbon, water and nutrient implications for agriculture   |
| <a href="#">WO 2024014336 A1</a> | DENSO CORP                         | Freshness maintaining system  |
| <a href="#">WO 2024017729 A1</a> | GEA FARM<br>TECHNOLOGIES<br>GMBH   | Apparatus and method for monitoring a milking process   |
| <a href="#">WO 2024023728 A1</a> | PREC PLANTING<br>LLC               | Agricultural sample packaging system  |
| <a href="#">WO 2024025527 A1</a> | NEATLEAF INC                       | Aerial sensor and manipulation platform for farming and method of using same  |
| <a href="#">WO 2024006488 A1</a> | SOIL IN<br>FORMATION PBC           | Total soil carbon sensing system  |
| <a href="#">WO 2024026060 A1</a> | CNH IND<br>AMERICA LLC             | Agricultural system and method for determining header throughput of a harvester   |
| <a href="#">WO 2024043363 A1</a> | KOREA<br>ELECTRONICS<br>TECHNOLOGY | Method and device for providing reference color information of crop by using image segmentation technique                           |
| <a href="#">WO 2024023053 A1</a> | SIGNIFY HOLDING<br>BV              | Method and system for illuminating plants with artificial light   |

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|----------------------------------|---|--|
| <a href="#">WO 2024035913 A1</a> | CNH IND AMERICA LLC                                 | Active deck plate opening  |
| <a href="#">WO 2024005843 A1</a> | IRRIGREEN INC                                       | Pressure sensing in a rotary sprinkler   |
| <a href="#">WO 2024033919 A1</a> | XTRION AGRICULTURE INNOVATION LTD                   | Plant growing system for providing electrical power to enhance growth  |
| <a href="#">WO 2024019632 A1</a> | PUBLICHNOE AKTSIONERNOE OBSHCHESTVO SBERBANK RUSSIA | Device and method for determining crop productivity  |
| <a href="#">WO 2024008374 A1</a> | AMAZONEN WERKE H DREYER SE & CO KG                  | Method for controlling the smooth running of a share unit  |
| <a href="#">WO 2024054182 A1</a> | BOZKURT SABRI                                       | Agro artificial intelligence fertilization and irrigation automation system  |
| <a href="#">WO 2024009326 A1</a> | AREETE BUSINESS SOLUTIONS PVT LTD                   | lot-based cattle health and heat monitoring system   |
| <a href="#">WO 2024031164 A1</a> | GTS DO BRASIL LTDA                                  | Electrically driven agricultural platform  |
| <a href="#">WO 2024054663 A1</a> | REALMFIVE INC                                       | Liquid monitoring system and method  |
| <a href="#">WO 2024039292 A1</a> | SCR ENG LTD   | Monitoring device for an agricultural farm   |
| <a href="#">WO 2024009244 A1</a> | LOAM BIO PTY LTD                                    | Systems and methods for agricultural additive delivery   |
| <a href="#">WO 2024033673 A1</a> | KAVAKPOUR ALI                                       | Intelligent subsurface injection irrigation system   |
| <a href="#">WO 2024035407 A1</a> | DEERE & CO  | Systems and methods for predictive harvesting logistics  |
| <a href="#">WO 2024023597 A1</a> | NEWDELMAN MITCHELL J                                | Hollow shaft injection drilling array  |
| <a href="#">WO 2024007141 A1</a> | INST OF FARMLAND IRRIGATION OF CAAS                 | Regional deep soil moisture estimation model establishing method, and system   |
| <a href="#">WO 2024054237 A1</a> | MICROSHARE INC                                      | Smart pest trap in a policy fabric and sharing system  |
| <a href="#">WO 2024044830 A1</a> | CNH IND BRASIL LTDA                                 | System and method for an agricultural harvester  |
| <a href="#">WO 2024052757 A1</a> | RPERCEPTION LTD                                     | Robotic sprayer  |
| <a href="#">WO 2024036397 A1</a> | VADERSTAD IND INC                                   | Look-ahead calibration and out-of-calibration detection or response for sectional control technology of an air seeding apparatus |
| <a href="#">WO 2024052804 A1</a> | LINCOLN AGRITECH LTD                                | Systems and methods for measuring properties of water at site  |
| <a href="#">WO 2024035934 A1</a> | HEARD MARTIN PERRY                                  | Ultrasound controlled spot sprayer and methods for crop protection   |
| <a href="#">WO 2024013577 A1</a> | MORADKHANI FARAS                                    | An intelligent farm task management system   |
| <a href="#">WO 2024028360 A1</a> | SOURCE AG INT B V                                   | Greenhouse environment optimisation  |
| <a href="#">WO 2024016064 A1</a> | HARTWIG LEONIDIA LEITZKE                            | Robotised equipment for weighing poultry   |
| <a href="#">WO 2024019231 A1</a> | SEOUL NAT UNIV R&DB FOUNDATION                      | Air recirculation and ventilation system for pig house   |
| <a href="#">WO 2024020829 A1</a> | SHENZHEN XPECTVISION TECH CO LTD                    | Imaging system and method for sorting animals by anatomy   |
| <a href="#">WO 2024020629 A1</a> | SENSORC PTY LTD                                     | Soil carbon sensor and sensing arrangement   |
| <a href="#">WO 2024020418 A1</a> | CARBON METRICS GLOBAL                               | Carbon offset platform   |
| <a href="#">WO 2024023593 A1</a> | NEWDELMAN MITCHELL J                                | Sub-surface injection system for subsurface blending and horizon creation  |
| <a href="#">WO 2024020599 A2</a> | DONALD DANFORTH PLANT SCIENCE CENTER                | Plants with reduced plasticity   |
| <a href="#">WO 2024038469 A1</a> | URBANKISAAN FARMS PVT LTD                           | System and method for automated dosing of stock solution   |

[WO 2024026118 A2](#)

RAIN BIRD CORP

Irrigation systems and methods with satellite communications

[...ver más](#)

## REDES DE SENSORES PARA ENTORNOS URBANOS O PÚBLICOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

|                                  |   |  |
|----------------------------------|---|--|
| <a href="#">WO 2024015708 A1</a> | AISLEWORX TECH LLC                                | Mobile apparatus with display and lens technology  |
| <a href="#">WO 2024026810 A1</a> | SIN CHANG HUN IND CO LTD                          | Electronic device cloud management system  |
| <a href="#">WO 2024016157 A1</a> | GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP LTD | Sensing and communication method and apparatus, and communication device                                     |
| <a href="#">WO 2024048901 A1</a> | INBIC INC   | System and method for object detection and tracking by using edge cctv                                       |
| <a href="#">WO 2024025421 A1</a> | KONGSBERG MARITIME AS                             | Multi-sensor and related aspects   |
| <a href="#">WO 2024054633 A1</a> | EVOQUA WATER TECH LLC                             | ENABLING INTERNET OF THINGS (iot) CAPABILITIES IN LEGACY WATER TREATMENT SYSTEMS                             |
| <a href="#">WO 2024025322 A1</a> | BIONANO HEALTH GUARD RES CENTER                   | Autonomous mobile system for detecting hazardous substances in air   |
| <a href="#">WO 2024042510 A1</a> | UNIV RAMOT  | A system and method of controlling a swarm of agents   |
| <a href="#">WO 2024023377 A1</a> | UNIV ALICANTE                                     | Low-noise system for synchronously and wirelessly acquiring ambient noise signals in seismic sensor networks |
| <a href="#">WO 2024020375 A2</a> | DONG BING   | Software platform to conduct building onsite weather forecasting with crowdsourcing data                     |

[...ver más](#)

## REDES DE SENSORES PARA DETECTAR INCENDIOS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

|                                  |   |  |
|----------------------------------|---|--|
| <a href="#">WO 2024046780 A1</a> | WAGO<br>VERWALTUNGS<br>GMBH                       | Control of building services systems   |
| <a href="#">WO 2024006172 A1</a> | RESCUE AIR<br>SYSTEMS INC                         | Method and system of air/environmental parameter based automatic closing of one or more valves to isolate breathable air supplied to one or more levels of a structure having a firefighter air replenishment system implemented therein |
| <a href="#">WO 2024005890 A1</a> | RESCUE AIR<br>SYSTEMS INC                         | Method and system of air parameter based automatic bypassing of a source of breathable air in a firefighter air replenishment system implemented within a structure  |
| <a href="#">WO 2024013310 A1</a> | TRINAMIX GMBH                                     | Temperature drift compensation of photoresistors   |
| <a href="#">WO 2024012684 A1</a> | BOSCH GMBH<br>ROBERT                              | Method and system for fire detection   |
| <a href="#">WO 2024003748 A1</a> | AIR IP HOLDINGS<br>LTD                            | Capsule  |
| <a href="#">WO 2024005701 A1</a> | TERMISK<br>SYSTEMTEKNIK I<br>SVERIGE AB           | A system and method for fire detection   |
| <a href="#">WO 2024013528 A1</a> | WATERSCOPE<br>ZRT                                 | Fire hydrant with improved sensing and operating properties and method for reporting the operational status of the fire hydrant  |
| <a href="#">WO 2024050046 A1</a> | UBICQUIA INC                                      | Apparatus, system, and method for detecting optical events associated with distribution transformers   |
| <a href="#">WO 2024047434 A1</a> | FASR FULL<br>AUTMATIC<br>SPRINKLER<br>ROBOT ZANON | Automatic fire extinguishing system for parking spaces for electric vehicles   |
| <a href="#">WO 2024043601 A1</a> | SAMSUNG<br>ELECTRONICS CO<br>LTD                  | Cooking apparatus for detecting fire risk and control method therefor  |
| <a href="#">WO 2024044742 A1</a> | HALE PRODUCTS<br>INC                              | Fire-fighting device including a distributed control system  |
| <a href="#">WO 2024036127 A2</a> | HAS LLC   | Networks, systems and methods for wildfire mitigation  |
| <a href="#">WO 2024006039 A1</a> | RESCUE AIR<br>SYSTEMS INC                         | Methods and system of incident based camera device activation in a firefighter air replenishment system having breathable air supplied therein   |
| <a href="#">WO 2024043548 A1</a> | LG ENERGY<br>SOLUTION LTD                         | Battery pack with enhanced fire safety   |

[..ver más](#)

## OTRAS REFERENCIAS

| Nº PUBLICACIÓN                   | SOLICITANTE  | CONTENIDO TÉCNICO  |
|----------------------------------|--|--|
| <a href="#">WO 2024030452 A1</a> | EBB CARBON INC   | Measurement, reporting, and verification (mrv) for ocean carbon dioxide removal systems  |
| <a href="#">WO 2024030397 A1</a> | THE AES CORP   | Method and system for operating a wind farm by reconciling performance and operational constraints   |
| <a href="#">WO 2024011079 A1</a> | JOHNSON CONTROLS TYCO IP HOLDINGS LLP                              | Method and system to provide alarm risk score analysis and intelligence  |
| <a href="#">WO 2024047385 A1</a> | ERICSSON TELEFON AB L M  | Dynamic application vulnerable use cases identification in a cloud native environment  |
| <a href="#">WO 2024033442 A1</a> | ASSA ABLOY AB  | System and method for transporting csi frames  |
| <a href="#">WO 2024050365 A1</a> | HEIRLOOM CARBON TECH INC   | Controls architecture for predicting and maintaining co2 uptake rates in direct air capture contactors, and methods of operating the same  |
| <a href="#">WO 2024058709 A1</a> | HITACHI LTD  | Method and system for facility management for identifying actionable event in relation to a building                                       |
| <a href="#">WO 2024050415 A1</a> | DRESSER LLC  | Powering sensors with an existing process control loop   |
| <a href="#">WO 2024003217 A1</a> | CLEAR SEA GMBH   | Method and apparatus for categorising foodstuffs   |
| <a href="#">WO 2024006070 A1</a> | JOHNSON CONTROLS TYCO IP HOLDINGS LLP                              | An aircraft surveillance system  |
| <a href="#">WO 2024013486 A1</a> | D BUG LTD  | Rearing system for insect larvae, method of rearing insect larvae, method of producing a food product or a feed product from insect larvae |
| <a href="#">WO 2024041904 A1</a> | SIEMENS AG   | Predicting a batch quality value by a machine learning model for a dedicated batch of material in a production line                        |
| <a href="#">WO 2024044018 A1</a> | INVENSENSE INC   | Event activity detection signaling   |
| <a href="#">WO 2024015130 A1</a> | RAYTHEON CO  | Triplet acoustic ring assembly and nested array  |
| <a href="#">WO 2024004770 A1</a> | NATIONAL UNIV CORPORATION TOKYO UNIV OF AGRICULTURE AND TECHNOLOGY | Sensing system and sensing method  |
| <a href="#">WO 2024002725 A1</a> | SIEMENS AG   | Device for monitoring the condition of a machine   |
| <a href="#">WO 2024033088 A1</a> | STEINEL GMBH   | Building services element, building control system comprising same, and method for controlling a device                                    |
| <a href="#">WO 2024046783 A1</a> | SIGNIFY HOLDING BV   | Operating with compromised master controllers for electrical systems   |
| <a href="#">WO 2024010821 A1</a> | GEN ELECTRIC   | System and method for multi-gas sensing at several operating temperatures  |
| <a href="#">WO 2024006321 A1</a> | SCHLUMBERGER TECHNOLOGY CORP                                       | Continuous monitoring system for detecting, locating, and quantifying fugitive emissions   |
| <a href="#">WO 2024010771 A1</a> | UNIVERSAL CITY STUDIOS LLC   | Amusement park interactive guidance system   |
| <a href="#">WO 2024033037 A1</a> | ZAHNRADFABRIK FRIEDRICHSHAFEN                                      | Connecting a strain gauge to a measurement object  |
| <a href="#">WO 2024056563 A1</a> | KONINKLIJKE PHILIPS NV   | An apparatus for increasing an integrity of signals in a signaling network   |
| <a href="#">WO 2024008301 A1</a> | DOMETIC SWEDEN AB  | Minibar communication  |
| <a href="#">WO 2024030510 A1</a> | SAUDI ARABIAN OIL CO   | Wireless hydrogen subsurface sensing framework for reservoir optimization  |
| <a href="#">WO 2024049534 A1</a> | QUALCOMM INC   | Method for distributed compute operation across connected devices  |
| <a href="#">WO 2024015661 A1</a> | MAXAR INTELLIGENCE INC   | Onboard geolocation for images   |
| <a href="#">WO 2024002453 A1</a> | EATON INTELLIGENT POWER LTD  | Determining degradation of an electrical device  |
| <a href="#">WO 2024006642 A1</a> | ALARM COM INC  | Automated property humidity control  |



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|----------------------------------|-----------------------------------|--|
| <a href="#">WO 2024012293 A1</a> | XPT EDS HEFEI CO LTD              | Method for diagnosing failure of electric driving component of vehicle, and control apparatus and vehicle  |
| <a href="#">WO 2024028114 A1</a> | ERICSSON TELEFON AB L M           | Determining anomalous state of wireless communication devices  |
| <a href="#">WO 2024053765 A1</a> | LG ELECTRONICS INC                | Guide robot and guide robot operation method   |
| <a href="#">WO 2024029236 A1</a> | EBARA CORP                        | Information processing device, inference device, machine learning device, information processing method, inference method, and machine learning method |
| <a href="#">WO 2024031951 A1</a> | UNIV DONGHUA                      | Device for using airflow under clothes to evaluate thermal protection performance  |
| <a href="#">WO 2024010764 A1</a> | MORGEN TECH INC                   | Tunneling of short-range sensor data through long-range wireless technology  |
| <a href="#">WO 2024049177 A1</a> | LG ENERGY SOLUTION LTD            | Battery diagnosis device, battery pack, electric vehicle, and battery diagnosis method   |
| <a href="#">WO 2024010819 A1</a> | GEN ELECTRIC                      | Systems and methods for gas sensing with electrochemical gas sensors   |
| <a href="#">WO 2024017390 A1</a> | POSITEC POWER TOOLS SUZHOU CO LTD | Autonomous working apparatus and system, and control method  |
| <a href="#">WO 2024012204 A1</a> | SHI ZHAOZHOU                      | Fishing reel electromagnetic braking device, fishing line and speed measurement mechanism  |
| <a href="#">WO 2024032460 A1</a> | VIVO MOBILE COMMUNICATION CO LTD  | Data collection method and apparatus and communication device  |
| <a href="#">WO 2024014575 A1</a> | WIDICO INC                        | Speech recognition and facial recognition-type gas safety management system  |
| <a href="#">WO 2024010458 A1</a> | EQUINOR ENERGY AS                 | Sensing within a subsea electric architecture in a wind farm   |
| <a href="#">WO 2024022735 A1</a> | SONY GROUP CORP                   | Methods, communications devices, and infrastructure equipment  |
| <a href="#">WO 2024025589 A1</a> | PALO ALTO RES CT INC              | Feedback-based device for nucleation control   |
| <a href="#">WO 2024022851 A1</a> | SIEMENS AG                        | Method of training a machine learning model for detecting one or more faults   |
| <a href="#">WO 2024040359 A1</a> | MADARIAGA ELGUETA GABRIEL ELICEO  | System and method for measuring fluid flow in pressurised and/or atmospheric systems that uses at least one valve as a sensor element                  |
| <a href="#">WO 2024000010 A1</a> | RHEEM AUSTRALIA PTY LTD           | Sensor strip for water heater  |
| <a href="#">WO 2024056293 A1</a> | CONTINENTAL AUTOMOTIVE TECH GMBH  | Method and system to authenticate camera device and camera data from common attacks  |
| <a href="#">WO 2024010904 A1</a> | OCEANEERING INT INC               | Highly available multimedia ocean perception system  |
| <a href="#">WO 2024044393 A1</a> | CEATZ INC                         | Improving utilization of a physical dining environment using artificial intelligence   |
| <a href="#">WO 2024013413 A1</a> | GENOVES RAMIREZ PEDRO             | Unmanned aerial system for autonomously delivering and collecting products   |
| <a href="#">WO 2024025113 A1</a> | SAMSUNG ELECTRONICS CO LTD        | Vacuum cleaner and control method for same   |
| <a href="#">WO 2024010736 A1</a> | APPLIED MATERIALS INC             | Sustainability monitoring platform with sensor support   |
| <a href="#">WO 2024039428 A1</a> | ITRON INC                         | Efficient compression of sensor data   |
| <a href="#">WO 2024040308 A1</a> | COMMW SCIENT IND RES ORG          | Sensor apparatus for use in liquids, suspensions and slurries  |
| <a href="#">WO 2024015985 A1</a> | BLACK & VEATCH HOLDING CO         | Method and computing device for detecting anomalous sensor data  |
| <a href="#">WO 2024014275 A1</a> | CYNAPS INC                        | Ventilation control system   |
| <a href="#">WO 2024011321 A1</a> | 9374 0587 QUEBEC INC              | Acoustic tracking system   |
| <a href="#">WO 2024025270 A1</a> | LG ELECTRONICS INC                | Method and device for displaying likelihood of occupying road space  |
| <a href="#">WO 2024043801 A1</a> | SAUDI ARABIAN OIL CO              | Method and apparatus for autonomous gravity and/or magnetic field measurement  |
| <a href="#">WO 2024026370 A1</a> | PENTAIR INC                       | Aquatic equipment monitoring system and method   |
| <a href="#">WO 2024044154 A1</a> | NEC LAB AMERICA INC               | Scalable biometric sensing using distributed mimo radars   |
| <a href="#">WO 2024015891 A1</a> | UNIV CALIFORNIA                   | Image and depth sensor fusion methods and systems  |

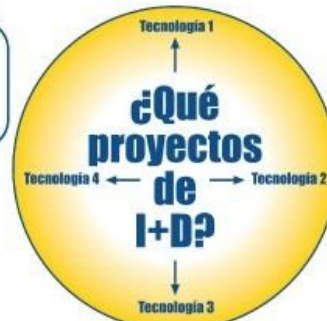


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| <a href="#">WO 2024018227 A1</a> | TOTAL VEHICLE SOLUTIONS GROUP LTD        | Intelligent drum cycles for concrete mixers  |
| <a href="#">WO 2024030555 A1</a> | BALTIMORE AIRCOIL CO INC                 | Drift detection apparatus, system, and method  |
| <a href="#">WO 2024040307 A1</a> | COMMW SCIENT IND RES ORG                 | Sensor apparatus for partially saturated porous media applications   |
| <a href="#">WO 2024040367 A1</a> | TANGENE INCORPORATED                     | Method and apparatus for monitoring organisms by means of artificial intelligence-based automatic system   |
| <a href="#">WO 2024024431 A1</a> | mitsubishi heavy ind thermal systems ltd | Monitoring system, monitoring method, and program  |
| <a href="#">WO 2024035731 A1</a> | ZODIAC POOL SYSTEMS LLC                  | Water quality control systems and methods for swimming pools and spas  |
| <a href="#">WO 2024020617 A1</a> | PROA ANALYTICS PTY LTD                   | Wildlife detection, deterrent, and self-cleaning system and method for environmental instrumentation   |
| <a href="#">WO 2024043767 A1</a> | LG ENERGY SOLUTION LTD                   | Cylindrical battery comprising pressure sensor, apparatus for monitoring swelling pressure and battery management system comprising same   |
| <a href="#">WO 2024053342 A1</a> | PANASONIC IP MAN CO LTD                  | Relay device, information collection system, and relay method  |
| <a href="#">WO 2024022156 A1</a> | HUAWEI TECH CO LTD                       | Method for establishing sensing network, and related apparatus   |
| <a href="#">WO 2024014089 A1</a> | SIDEPEAK CO LTD                          | Information processing device, information processing program, and information processing system   |
| <a href="#">WO 2024024799 A1</a> | UNIV KAGOSHIMA                           | Sailor protection device, sailor protection system, sailor protection program, watercraft activity inference device, report writing assistance system, and watercraft activity inference program |
| <a href="#">WO 2024011286 A1</a> | UNIV ADELAIDE                            | Structural health monitoring sensor and system   |
| <a href="#">WO 2024005929 A1</a> | WESTERN DIGITAL TECH INC                 | Audio sensors for controlling surveillance video data capture  |
| <a href="#">WO 2024025008 A1</a> | PLUTO                                    | Method for providing pet-related social network platform   |
| <a href="#">WO 2024006219 A1</a> | FREEMPORT MINERALS CORP                  | System and method for determining estimated remaining mineral in a stockpile   |
| <a href="#">WO 2024019724 A1</a> | FISHER ROSEMOUNT SYSTEMS INC             | Systems, apparatus, articles of manufacture, and methods for sequence of event generation for a process control system   |
| <a href="#">WO 2024035961 A2</a> | HARTDESIGN! LTD                          | Pet chase toy  |

# ¡¡Por sólo 500€ añade 150 especialistas\* a su Equipo de I+D!!



Los ITPs\*\* de la OEPM nos proporcionan información imprescindible para decidir la priorización óptima de proyectos de I+D en los que invertir.



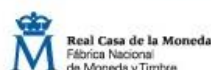
Los ITPs\*\* de la OEPM nos han ahorrado horas de revisión bibliográfica para definir el punto de partida de nuestros proyectos de I+D.



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



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.



\* La OEPM cuenta con más de 150 examinadores de patentes especializados en los diversos sectores tecnológicos y en la búsqueda de información científico-técnica.

\*\* Los Informes Tecnológicos de Patentes o ITPs son estudios a la medida que incluyen una búsqueda de patentes y de literatura científica con un análisis en profundidad de los documentos más relevantes. Su coste es de 440 euros más IVA.