

Boletín VT

COCHE INTELIGENTE 40

4º trimestre 2019

Vigilancia Tecnológica

La integración de las tecnologías de la Información y Comunicaciones (TIC) en vehículos e infraestructuras viales se ha mostrado muy provechosa a la hora de obtener soluciones avanzadas a los problemas del transporte de hoy en día.

Los Sistemas de Coches Inteligentes buscan facilitar la interacción entre el conductor, el vehículo y la carretera, de manera que los sistemas autónomos de abordaje se complementan con sistemas que cooperan entre los diferentes vehículos o entre los vehículos y las infraestructuras, para mejorar, de este modo, aspectos de gran relevancia, tales como la reducción de accidentes, la eficiencia energética o la reducción de la contaminación.

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 algunos

de los sectores prioritarios contemplados en el desarrollo del “Coche Inteligente”, tales como: los sistemas de gestión optimizada del tráfico, las redes sensoriales o de comunicaciones integradas en los vehículos, los sistemas de gestión de plazas de aparcamiento o de peajes, y los sistemas de notificación de accidentes o averías a servicios de emergencia u otros conductores cercanos.

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:

- Gestión del tráfico
- Redes vehiculares
- Gestión de aparcamientos y peajes
- Notificación de accidentes
- Otras referencias

NIPO: 116-19-010-1

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.

GESTIÓN DEL TRÁFICO

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2019237072 A1	NVIDIA CORP	Virtualized intrusion detection and prevention in autonomous vehicles
WO 2019229345 A1	PSA AUTOMOBILES SA	Autonomous crossing of an obligatory passage zone on a road
WO 2019246246 A1	CAVH LLC	Connected automated vehicle highway systems and methods related to heavy vehicles
WO 2019234468 A1	NISSAN MOTOR	Vehicle management system, vehicle management device, and vehicle management method, and method and vehicle management device
WO 2019245555 A1	VISA INT SERVICE ASS	System, method, and computer program product for machine-learning-based traffic prediction
WO 2019166431 A1	DEUTSCH ZENTR LUFT & RAUMFAHRT	Method and device for controlling a signal light system
WO 2019229602 A1	VEONEER SWEDEN AB	Vehicle collision avoidance method and system
WO 2019233315 A1	HANGZHOU HIKROBOT TECH CO LTD	Method and apparatus for controlling automated guided vehicle, and storage medium
WO 2019206833 A1	ECOLE NAT DE LAVIATION CIVILE	Method and apparatus monitoring a space
WO 2019232355 A1	TUSIMPLE	System and method for proximate vehicle intention prediction for autonomous vehicles
WO 2019223987 A1	ZAHNRADFABRIK FRIEDRICHSHAFEN	Method and device for detecting a drivable area away from roads
WO 2019238177 A1	CONTI TEMIC MICROELECTRONIC GMBH	Method for detecting identification lamps
WO 2019200477 A1	GOVERNING COUNCIL UNIV TORONTO	Method and system for multimodal deep traffic signal control
WO 2019159605 A1	HONDA MOTOR CO LTD	Operation management device, operation management method and operation management system
WO 2019219135 A1	CONTI TEMIC MICROELECTRONIC GMBH	Method for the autonomous operation of a following vehicle in a vehicle train
WO 2019162238 A1	RENAULT SAS	Motor vehicle driving assistance device and method
WO 2019178377 A1	STC INC	Systems and methods for detection of travelers at roadway intersections
WO 2019158963 A1	PREMEL SA	Electronic device for event detection for traffic regulation, and corresponding method
WO 2019189216 A1	NEC CORP	Traffic monitoring device, traffic monitoring system, traffic monitoring method, and non-transitory computer-readable medium with program stored thereon
WO 2019187856 A1	PANASONIC IP MAN CO LTD	Control device and signal control system
WO 2019210315 A1	CUBIC CORP	Adaptively controlling traffic movements for driver safety
WO 2019165616 A1	HUAWEI TECH CO LTD	Signal light control method, related device, and system
WO 2019179576 A1	DEUTSCHE BAHN AG	Method for planning or controlling the movements of a plurality of vehicles over a network of routes
WO 2019163261 A1	SUMITOMO ELECTRIC INDUSTRIES	Traffic signal control device, traffic signal control method, and computer program

WO 2019219264 A1	AUDI AG	Method for operating a motor vehicle
WO 2019194084 A1	PANASONIC CORP	Traffic monitoring system and traffic monitoring method
WO 2019161501 A1	MIOVISION TECH INCORPORATED	System and method for providing a digital intersection
WO 2019170986 A1	ORANGE	Method for adjusting the speed of vehicles moving in a convoy
WO 2019178548 A1	NVIDIA CORP	Determining drivable free-space for autonomous vehicles
WO 2019220353 A2	NOTRAFFIC LTD	System and method for using v2x and sensor data
WO 2019193615 A2	RAMBARAN ATISH ANDREA	Management system of traffic lights located along the route of rescue running vehicles.
WO 2019173547 A1	BOSCH GMBH ROBERT	Odometry system and method for tracking traffic lights

[..ver más](#)

REDES VEHICULARES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2019239967 A1	HONDA MOTOR CO LTD	Shared-vehicle management system
WO 2019241606 A1	LUCKEVICH MARK S	Devices, systems, and methods for transmitting vehicle data
WO 2019225259 A1	PANASONIC IP CORP AMERICA	Communication control device, unauthorized access-detecting electronic control unit, mobility network system, communication control method, unauthorized access detection method and program
WO 2019219333 A1	SIEMENS MOBILITY GMBH	Method and access device for providing data access to a vehicle network of a track-bound vehicle
WO 2019168355 A1	AD CONNECTED INC	Apparatus and method for using connected vehicles as an advertisement platform
WO 2019225257 A1	PANASONIC IP CORP AMERICA	Abnormality detection device, abnormality detection method, and program
WO 2019223958 A1	DRAEXLMAIER LISA GMBH	Conductor arrangement and production method
WO 2019171669 A1	SUMITOMO ELECTRIC INDUSTRIES	Switch device, vehicle-mounted communication device, vehicle-mounted communication system, time correction method, and time correction program
WO 2019193786 A1	PANASONIC IP CORP AMERICA	Log output method, log output device, and program
WO 2019174887 A1	BOSCH GMBH ROBERT	Method and device for a c2x communication between motor vehicles of a motor vehicle combination
WO 2019172944 A1	SF MOTORS INC	Systems and methods of inter-vehicle communication
WO 2019173611 A1	MILE AUTO INC	Monitoring and tracking mode of operation of vehicles to determine services
WO 2019158802 A1	NOKIA TECHNOLOGIES OY	Enhancing communication

[..ver más](#)

GESTIÓN DE APARCAMIENTOS Y PEAJES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2019235463 A1	KDDI CORP	Information providing system, terminal device, information distributing device, information providing method, and computer program
WO 2019230174 A1	DENSO CORP	Communication device for vehicle, communication device for parking lot, and parking lot management system
WO 2019233916 A1	VALEO SCHALTER & SENSOREN GMBH	Method and overall system for detecting parking spaces
WO 2019233783 A1	BOSCH GMBH ROBERT	Method and system for making available parking spaces or stopping spaces
WO 2019182621 A1	SF MOTORS INC	Multi-network-based path generation for vehicle parking
WO 2019206860 A1	RENAULT SAS	Method for a motor vehicle to select a preferred traffic lane to cross a toll area
WO 2019215957 A1	DENSO CORP	Vehicle position detection system and vehicle position detection device
WO 2019192995 A1	CPT GROUP GMBH	Device for positioning a motor vehicle on a parking space for inductive charging
WO 2019225820 A1	SK TELECOM CO LTD	Parking guidance apparatus and method
WO 2019241224 A1	RAYTHEON CO	Architectures for vehicle tolling
WO 2019179678 A1	BAYERISCHE MOTOREN WERKE AG	Method for operating a toll system
WO 2019233777 A1	VALEO SCHALTER & SENSOREN GMBH	Driving assistance system
WO 2019177926 A1	SAUDI ARABIAN OIL CO	Parking indicator comprising indicator retracting mechanism
WO 2019174851 A1	VOLKSWAGEN AG	Method and assistance system for generating recommendations for parking in parking garages
WO 2019214163 A1	GUANGZHOU AUTOMOBILE GROUP CO	Valet parking method and device
WO 2019225270 A1	HITACHI AUTOMOTIVE SYSTEMS LTD	Parking management system, vehicle control device, and control center
WO 2019234019 A1	VALEO SCHALTER & SENSOREN GMBH	Server, method, and computer-readable storage medium for automated parking
WO 2019198142 A1	mitsubishi heavy ind mach systems ltd	Roadside device, vehicle-mounted equipment, road-to-vehicle communication system, road-to-vehicle communication method, and program
WO 2019214430 A1	NINGBO GEELY AUTOMOBILE RES	Parking system and method
WO 2019215801 A1	NEC CORP	Fee control system, fee control device, fee control method, and computer-readable recording medium
WO 2019223586 A1	HANGZHOU HIKVISION DIGITAL TEC	Method and apparatus for detecting parking space usage condition, electronic device, and storage medium
WO 2019158527 A1	JAGUAR LAND ROVER LTD	Automated activation of a remote parking feature
WO 2019160779 A1	MCCONNELL RODERICK	Traffic metering system
WO 2019217263 A1	SIMPLYPARK LTD	Computing system for defining and providing access to a parking area

[...ver más](#)

NOTIFICACIÓN DE ACCIDENTES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2019235127 A1	JVCKENWOOD CORP	Record/play device, record/play method, and program
WO 2019238242 A1	VOLVO CONSTR EQUIP AB	A method and a control unit for identifying an accident situation between at least two vehicles
WO 2019211065 A1	VOLKSWAGEN AG	Emergency reporting device in a motor vehicle
WO 2019215635 A1	META SYSTEM SPA	Telematic device for motor vehicles
WO 2019221163 A1	NEC CORP	Information center device, terminal, information processing method and program
WO 2019224712 A1	UBER TECHNOLOGIES INC	Automobile accident detection using machine learned model
WO 2019219264 A1	AUDI AG	Method for operating a motor vehicle
WO 2019164035 A1	RTST CO LTD	Automatic accident rescue request method and system using smartphone
WO 2019210319 A1	CUBIC CORP	Broadcasting details of objects at an intersection
WO 2019163204 A1	JVCKENWOOD CORP	Vehicle recording device, vehicle recording method, and program
WO 2019175796 A1	MORE VINIT SHAMKANT	A smart barrier
WO 2019172461 A1	SUNTECH INT LTD	Real-time acceleration sensor correction device for measuring vehicle movement, and acceleration sensor correction method using same

[...ver más](#)

OTRAS REFERENCIAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
WO 2019235654 A1	DATA M LTD	Method for calculating energy consumption amount of vehicle by utilizing deep learning to implement carbon emissions reduction
WO 2019232637 A1	COMPLETE INNOVATIONS INC	Multi-vehicle prediction system
WO 2019241565 A1	SKIP TRANSP INC	System and method for vehicle operation control
WO 2019246029 A1	ZOOX INC	Sensor obstruction detection and mitigation using vibration and/or heat
WO 2019197345 A1	MOTION S	Vehicular motion assessment method
WO 2019241639 A1	ALLSTATE INSURANCE CO	Processing system for evaluating autonomous vehicle control systems through continuous learning
WO 2019204800 A1	WERIDE CORP	Method and system for generating high definition map
WO 2019239354 A1	VOLVO CAR CORP	Prediction-based vehicle reservation systems
WO 2019158438 A1	TOMTOM TRAFFIC BV	Methods and systems for generating traffic volume or traffic density data
WO 2019186539 A1	ELGRABLY MICHAEL	Indications for vehicles
WO 2019223639 A1	HUAWEI TECH CO LTD	Wireless communication method and device
WO 2019220229 A1	BOSCH GMBH ROBERT	Ecu and lane departure warning system

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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.



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.



CONCLUSIÓN

¿Son patentables nuestros resultados?



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.

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