

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: 073-15-017-1

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 2016151625	mitsubishi electric corp	Traffic information estimation device and traffic information estimation method
WO 2016145626	fujiitsu ltd tan zhiming yang bingbing wu jianrong	Traffic abnormality detection method and device, and image monitoring system
WO 2016147350	sumitomo electric industries	Signal control device, computer program, storage medium, and signal control method
WO 2016151072	siemens ag	Traffic management in a traffic network
WO 2016143825	sumitomo electric industries	Roadside communication device, data relay method, central device, computer program, and data processing method
WO 2016128078	siemens ag	Method and system for promoting environmentally friendly means of transport
WO 2016143821	sumitomo electric industries	Roadside communication device, and data relay method
WO 2016137101	ind coop found chonbuk nat univ	Method and system for controlling to disperse traffic volume in time and space, using bidirectional communication
WO 2016137942	ge lighting solutions llc	Control of a traffic signaling system and remote control of light signaling devices such as traffic heads
WO 2016136616	sumitomo electric industries	Traffic index generation device, traffic index generation method, and computer program
WO 2016098361	sumitomo electric industries	Road-side control device, computer program, and information processing method
WO 2016106639	huawei tech co ltd	Internet-of-vehicles communication method and apparatus
WO 2016117147	sumitomo electric industries	Information processing device, roadside control device, cloud system, computer program and virtual machine operation method

[..ver más](#)

REDES VEHICULARES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2016123277	MASSACHUSETTS INST TECHNOLOGY	Transponder localization
WO 2016119834	NOKIA SOLUTIONS & NETWORKS OY	Method for communications reliability enhancements with access entity assistance
WO 2016132219	KING ABDULLAH UNIV OF SCIENCE AND TECH	Apparatus, system, and method for traffic monitoring
WO 2016148820	QUALCOMM INC	Location and range determination using broadcast messages
WO 2016128787	AUDI AG	Method and traffic management system for operating multiple motor vehicles
WO 2016144147	LG ELECTRONICS INC	Communication method of user equipment installed in vehicle in v2x communication system, and user equipment
WO 2016103669	PANASONIC IP MAN CO LTD	Vehicle sensor malfunction sensing device, traffic situation analysis device, vehicle sensor malfunction sensing system, traffic situation analysis system, and program
WO 2016111246	NEC CORP	Wireless terminal
WO 2016139748	PIONEER CORP INCREMENT P CORP	Route searching device, control method, program, and storage medium
WO 2016130701	RIDAR SYSTEMS LLC	Proximity awareness system for motor vehicles
WO 2016139747	PIONEER CORP INCREMENT P CORP	Vehicle control device, control method, program, and storage medium
WO 2016141980	NOKIA SOLUTIONS & NETWORKS OY	Method, apparatus, system and computer program for vehicular communication smart radio access zones
WO 2016103258	RAIMAN TIMOR	System and method for preventing accidents
WO 2016106685	HUAWEI TECH CO LTD	Transmission resource indication method and network device
WO 2016108963	BATTELLE MEMORIAL INSTITUTE	Temporal anomaly detection on automotive networks
WO 2016134855	AUDI AG	Motor vehicle communication network with switch device
WO 2016116973	PANASONIC IP CORP AMERICA	Invalid frame handling method, invalidity detection electronic-control unit and vehicle-mounted network system
WO 2016128788	CONTINENTAL AUTOMOTIVE GMBH	Intelligent car steering wheel security system
WO 2016109098	PAYPAL INC	Automotive optical communication system
WO 2016116976	PANASONIC IP CORP AMERICA	Irregularity detection rule update method, irregularity detection electronic control unit, and on-board network system
WO 2016116977	PANASONIC IP CORP AMERICA	Irregularity handling method and electronic control unit

[..ver más](#)



GESTIÓN DE APARCAMIENTOS Y PEAJES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2016148560	PIXELBYTE SDN BHD	System and method for finding and locating available parking space within an area
WO 2016148349	DINNOPLUS CO LTD	Virtual tollbooth-based automatic toll collection system using smart phone
WO 2016131625	BOSCH GMBH ROBERT	Parking space management system
WO 2016140969	LOCUS SOLUTIONS LLC	Systems and methods for monitoring transported items
WO 2016143849	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Tire pattern assessment device, vehicle model determining device, tire pattern assessment method and program
WO 2016143750	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Vehicle parameter measurement device, vehicle type determination device, vehicle parameter measurement method, and program
WO 2016142103	BAYERISCHE MOTOREN WERKE AG	Method for updating parking area information in a navigation system and navigation system
WO 2016143854	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Tire pattern assessment device, vehicle model determining device, ...
WO 2016142097	BOSCH GMBH ROBERT	Method and device for providing accessibility to a vehicle interior
WO 2016143672	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Vehicle type determination device, vehicle type determination method, and program
WO 2016128222	BLUECARSHARING	Method for locating available sites
WO 2016128056	NEC EUROPE LTD	Method and system for finding a free parking space for a car or the like
WO 2016142095	BOSCH GMBH ROBERT	Reservation system and a reservation method
WO 2016142940	KADOSH ITAI	System for monitoring a parking arena and parking enforcement
WO 2016150593	KAPSCH TRAFFICOM AG	Method for generating a digital record and roadside unit of a road toll system implementing the method
WO 2016140250	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Vehicle-axle-number detection device, vehicle-type determination system, vehicle-axle-number detection method, and program
WO 2016136720	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Vehicle type determination apparatus, vehicle type determination method, and program
WO 2016136660	MITSUBISHI HEAVY IND MECHATRONICS SYSTEMS LTD	Vehicle type determination device, toll collection facility, ...
WO 2016124805	MIRASOL GIEB ENRIQUE	Electronic device for controlling and regulating parking spaces
WO 2016123662	TMA CAPITAL AUSTRALIA PTY LTD	System, method and computer program for an access control system
WO 2016122639	HEWLETT PACKARD ENTPR DEV LP	Time-dependent demographics for digital billboards
WO 2016127215	DIVVY PARKING PTY LTD	Integrated booking system for vehicle parking

[...ver más](#)



NOTIFICACIÓN DE ACCIDENTES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2016149746	PENNA TALEESE	Vehicle safety system and method
WO 2016141983	NOKIA SOLUTIONS & NETWORKS OY	Method and apparatus for resource allocation in v2v communications system
WO 2016135645	ADDISON LEE LTD ADDISON LEE INC	Systems and methods for allocating networked vehicle resources in priority environments
WO 2016123424	SCOPE TECHNOLOGIES HOLDINGS LTD FUCHS GIL EMANUEL MORLOCK CLAYTON RICHARD	Remote accident monitoring and vehcile diagnostic distributed database
WO 2016140391	LG ELECTRONICS INC	Vehicle control device, vehicle driving assistance device, mobile terminal, and control method therefor
WO 2016140394	LG ELECTRONICS INC	Device for preventing vehicle accident and method for operating same
WO 2016119235	HUAWEI TECH CO LTD	Vehicle emergency call method, vehicle-mounted terminal and system
WO 2016118575	FOSTER GINNY WALSH MIKE MCNEELY RYAN	Systems and methods for alerting drivers of approaching emergency vehicles

[...ver más](#)

OTRAS REFERENCIAS

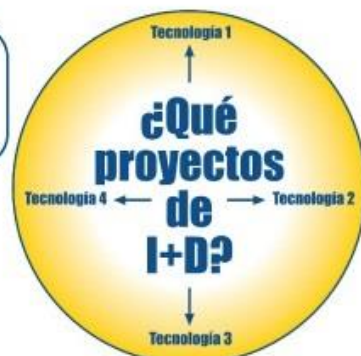
Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO 2016120092	BOSCH GMBH ROBERT	Method for operating a friction-coefficient database and friction-coefficient database
WO 2016092796	SONY CORP	Automatic driving control device and automatic driving control method, and program
WO 2016109482	BOSCH GMBH ROBERT	Drive state indicator for an autonomous vehicle
WO 2016119952	BOSCH GMBH ROBERT	Method for operating a control device of a motor vehicle
WO 2016142030	DAIMLER AG	Method and device for operating a vehicle
WO 2016133658	JAYBRIDGE ROBOTICS INC	Assistive vehicular guidance system and method
WO 2016132069	AGENCE FRANCAISE DE SÉCURISATION DES RESEAUX ROUTIERS	System and method for confirming lane use permission reserved for certain types of vehicles
WO 2016108012	VALEO COMFORT & DRIVING ASSISTANCE	Method for signing up a user to a service for controlling at least one vehicle functionality by means of a user terminal
WO 2016103041	HERE GLOBAL BV	Selecting feature geometries for localization of a device
WO 2016130755	ARPENT LLC	Method and system for transportation resource grouping and reallocation
WO 2016101570	ZTE CORP	Method and device for information notification
WO 2016112154	QUALCOMM INC	Transitioning from autonomous vehicle control to operator vehicle control
WO 2016129231	DENSO CORP	Inter-vehicle management device and inter-vehicle management method
WO 2016126321	DELPHI TECH INC	Method and apparatus for controlling an autonomous vehicle
WO 2016127386	BAYERISCHE MOTOREN WERKE AG ISERT CARSTEN	System and method for prompting vehicle driving conditions
WO 2016126319	DELPHI TECH INC	Pulsed led vehicle to vehicle communication system
WO 2016114191	NISSAN MOTOR	Routing and navigation of autonomous vehicle using passenger docking position
WO 2016126322	DELPHI TECH INC	Autonomous vehicle with unobtrusive sensors
WO 2016113976	OMRON TATEISI ELECTRONICS CO	Traffic violation management system and traffic violation management method
WO 2016126763	TRW AUTOMOTIVE US LLC	Keyless entry system linked to vehicle-to-vehicle communications system
WO 2016117790	LG ELECTRONICS INC	Apparatus for switching driving mode of vehicle and method thereof

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



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



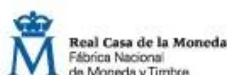
Los ITPs** de la OEPM detectaron solicitudes de patente relevantes cuando estábamos a mitad del proyecto y gracias a ello pudimos reconducir nuestra investigación.



CONCLUSIÓN



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.