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COOPERATIVE BEHAVIOR

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EP3075591	METHOD FOR IMPROVING ERGONOMICS OF A VEHICLE COCKPIT
EP3047023	METHOD FOR ASSISTING A DRIVER IN DRIVING AN EGO VEHICLE AND CORRESPONDING DRIVER ASSISTANCE SYSTEM
EP2950294	METHOD AND SYSTEM WITH AN ADVANCED DRIVER ASSISTANCE SYSTEM FOR RISK-BASED TRAFFIC SCENE ANALYSIS
EP2949536	METHOD FOR CONTROLLING A DRIVER ASSISTANCE SYSTEM
EP2950114	METHOD FOR ASSISTING A DRIVER IN DRIVING A VEHICLE, A DRIVER ASSISTANCE SYSTEM, A COMPUTER SOFTWARE PROGRAM PRODUCT AND VEHICLE
EP2942765	METHOD AND SYSTEM FOR PREDICTIVE LANE CHANGE ASSISTANCE, PROGRAM SOFTWARE PRODUCT AND VEHICLE
EP2746126	DRIVER ASSISTANCE SYSTEM

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HONDA

Intelligent gap setting for adaptive cruise control

EP3081447 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

REBHAN SVEN

KLEINEHAGENBROCK MARCUS

Filing date: 2015-04-14

Granting Date: 2020-07-01

IPC - International classification

B60R-021/0132	B60W-030/16*	G08G-001/16

CPC - Cooperative classification

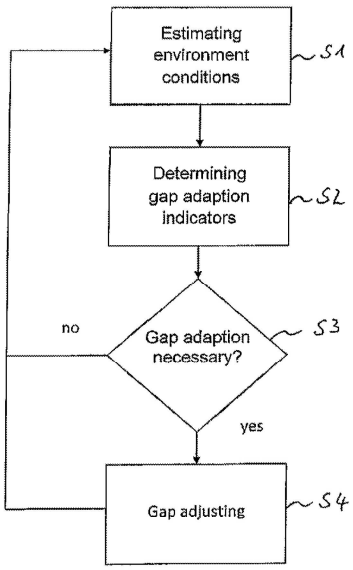
B60W-030/16*	B60W-2530/14	B60W-2540/04
B60W-2540/215	B60W-2550/00	B60W-2550/10
B60W-2550/12	B60W-2550/14	B60W-2550/146
B60W-2550/148	B60W-2550/302	B60W-2550/308
B60W-2550/408	B60W-2552/00	B60W-2552/30
B60W-2552/40	B60W-2554/00	B60W-2554/801
B60W-2554/804	B60W-2555/00	B60W-2555/20
B60W-2556/65	B60W-2750/308	B60W-2754/30

Family

JP6812109	B2	JP2016199252	A
EP3081447	B1	US20160304092	A1
US9969393	B2	EP3081447	A1

(EP3081447)

The present invention relates to a method for assisting a driver in driving a vehicle, in which sensor data are produced by at least one sensor (2, 3) physically sensing the environment of a host vehicle (E) and/or by obtaining data conveying information about the environment of a host vehicle (E), an object (A) in a path of the host vehicle (E) is detected based on the sensor data, a distance between the host vehicle (E) and the detected object (A) is controlled based on a preset gap (t GAP), environmental conditions of the host vehicle (E) are estimated (S1) based on the sensor data, gap adaption indicators associated to the estimated environmental conditions are determined (S2), wherein each of the gap adaption indicators indicates an extension or a reduction of the preset gap (t GAP) and the preset gap (t GAP) is adjusted (S4) based on the gap adaption indicators.



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HONDA

Method for improving ergonomics of a vehicle cockpit

EP3075591 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

SENDHOFF BERNHARD

Filing date: 2015-04-27

Granting Date: 2018-11-07

IPC - International classification

B60K-035/00	B60K-037/00*	B60K-037/04
B62D-025/14	G06F-017/50	G06F-030/10*
G06F-030/20		

CPC - Cooperative classification

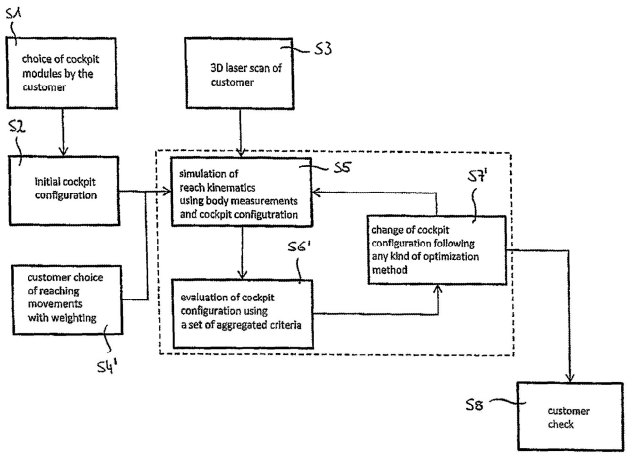
B60K-035/00*	B60K-037/00	B60K-037/04
B60K-2370/73	B60K-2370/736	B60K-2370/95
B62D-065/00	G06F-017/50/09	G06F-017/50/95*
G06F-030/15	G06F-030/20	

Family

JP6674780	B2	EP3075591	A3
US10460073	B2	US20160292352	A1
EP3075591	B1	EP3075591	A2
JP2016197395	A		

(EP3075591)

The invention relates to a method for improving ergonomics of a vehicle cockpit. At first information defining an initial cockpit configuration is obtained. Further, information on a cockpit user's shape and information of a seat and steering wheel position which the user typically uses while driving is obtained. This information altogether is fed into a bio-mechanical simulation which carries out the simulation on the basis of the information defining the initial cockpit configuration, the user's shape and the user's seat and steering means position. In the simulation an ergonomic quality criteria are calculated for reaching movements during driving. On the basis of the simulation result which is the quality criteria the cockpit configuration is then changed. The bio-mechanical simulation and the changing of the cockpit configuration in the optimization process is then repeated until a predetermined stop condition is fulfilled. Then the cockpit configuration which is achieved at that point in time is output as final cockpit-configuration.



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HONDA

Method for assisting a driver in driving an ego vehicle and corresponding driver assistance system
EP3048023 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

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GOERICK CHRISTIAN

CASAPIETRA EDOARDO

Filing date: 2015-01-23

Granting Date: 2018-11-28

IPC - International classification

B60W-030/095	B60W-030/10	B60W-040/04
B60W-040/06	B62D-015/02*	G06K-009/00
G08G-001/0965	G08G-001/16*	

CPC - Cooperative classification

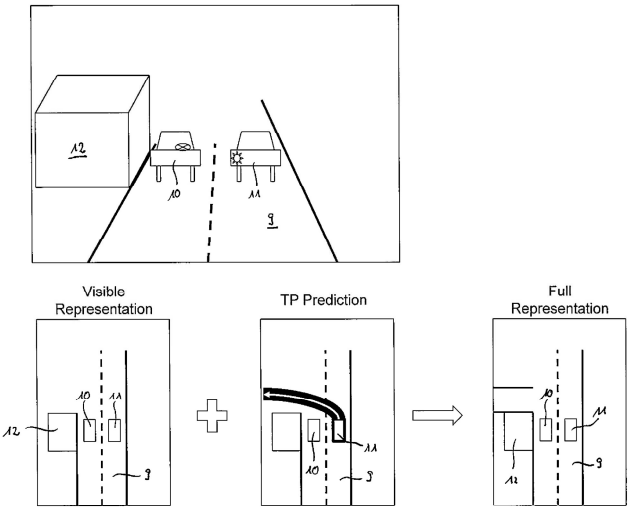
B60W-030/095	B60W-030/10	B60W-040/04
B60W-040/06	B62D-015/02/5	B62D-015/02/9*
G06K-009/00/791	G08G-001/0965	

Family

JP6800575	B2	JP2016136378	A
EP3048023	B1	US20160214647	A1
US9708004	B2	EP3048023	A1

(EP3048023)

Method and driver assistant system for assisting a driver in driving an ego vehicle. An environment of the ego vehicle is physically sensed and sensor data is produced. A representation of the environment is generated, wherein the representation consists of a plurality of representation segments each of which corresponds to a limited area of the environment. The sensor data is analyzed for generating characteristic information for at least a part of the limited areas of the environment and the characteristic information is assigned to the representation segment which corresponds to the respective area of the environment. Furthermore, a future and/or past movement behavior for a traffic object is estimated and characteristic information for at least one limited area of the environment is inferred on the basis of the estimated movement behavior. This characteristic information is assigned to the representation segment corresponding to the respective area of the environment and based on the resulting representation an evaluation is performed for determining a preferred path for the ego vehicle. Finally, an assistance signal based on the determined path is generated and output.



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HONDA

Method and vehicle with an advanced driver assistance system for risk-based traffic scene analysis

EP2950294 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

DAMEROW FLORIAN

EGGERT JULIAN

Filing date: 2014-06-20

Granting Date: 2019-05-08

IPC - International classification

B60R-021/00 B60W-030/095 G06K-009/00

G08G-001/16*

CPC - Cooperative classification

B60W-030/095/6* G06K-009/00/798 G06K-009/00/805

G08G-001/16/5 G08G-001/16/6

PCL - US patent classification

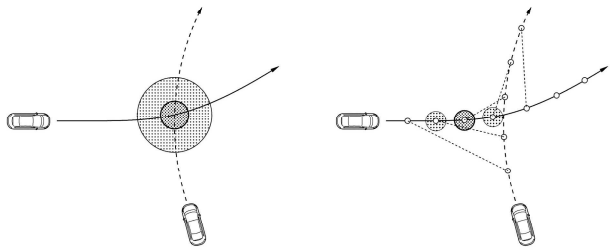
PCLO: 701001000*

Family

EP2950294	B1	JP2015228204	A
JP6232004	B2	US20150344030	A1
US9463797	B2	EP2950294	A1

(EP2950294)

The invention relates to a method for the support of driving an ego-vehicle and such ego-vehicle including a driver assistance system configured to carry out the method steps. At least one traffic participant and/or infrastructure element involved in the traffic situation is selected which is to be taken into consideration for the traffic scene analysis. A hypothetical future trajectory for the ego-vehicle is predicted gained by predicting the current state of the ego-vehicle and is varied to generate a plurality of ego-trajectory alternatives including the calculated hypothetical future ego-trajectory. At least one hypothetical future trajectory from another traffic participant gained by predicting the current state of the traffic participant and/or calculating of a hypothetical future state sequence of the infrastructure element is determined. On the basis of at least one pair of the ego-trajectory plus one other trajectory a plurality of a risk functions over future time or along the calculated hypothetical future ego-trajectory alternatives is calculated, wherein one risk function corresponds to one ego-trajectory alternative. The plurality of risk functions is combined into a risk map which is then analyzed. From the analysis result a control signal for assisting the driving of the ego-vehicle is generated.



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HONDA

Method for controlling a driver assistance system

EP2949536 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

HECKMANN MARTIN

WERSING HEIKO

Filing date: 2014-10-31

Granting Date: 2016-10-05

IPC - International classification

B60R-021/0134	B60W-050/08	B60W-050/10
B60W-050/14*	G06F-003/16	G08G-001/16*
G10L-013/00	G10L-015/00	G10L-015/18
G10L-015/22		

CPC - Cooperative classification

B60W-030/18/154	B60W-050/08*	B60W-050/10
B60W-050/14	B60W-2540/02	B60W-2540/21
G10L-015/18/07	G10L-015/22	

PCL - US patent classification

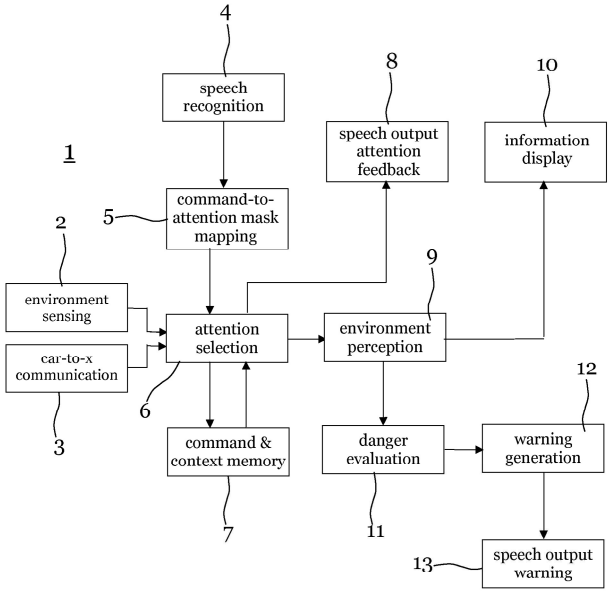
PCLO: 701001000*

Family

JP6353383	B2	JP2016001461	A
US9650056	B2	US20150344040	A1
EP2949536	B1	EP2949536	A1

(EP2949536)

The invention relates to a method for controlling a driver assistance system comprising the steps of providing information on an environment of a host vehicle, receiving a spoken instruction from a host vehicle driver, generating an attention delegation task for evaluation of the provided information from the spoken instruction, performing evaluation of provided information in accordance with said attention delegation task and outputting a result of the evaluation.



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Method for assisting a driver in driving a vehicle, a driver assistance system, a computer software program product and vehicle

EP2950114 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

WEISSWANGE THOMAS H

Filing date: 2014-05-30

Granting Date: 2020-03-04

IPC - International classification

B60R-021/00	B60W-030/14	B60W-050/14
G01S-007/24*	G01S-007/295	G01S-013/93
G08G-001/09	G08G-001/0967	G08G-001/16

CPC - Cooperative classification

B60W-030/14*	B60W-2550/00	B60W-2555/00
G01S-007/24	G01S-007/295	G01S-013/93/1
G08G-001/16/5	G08G-001/16/6	G08G-001/16/7

PCL - US patent classification

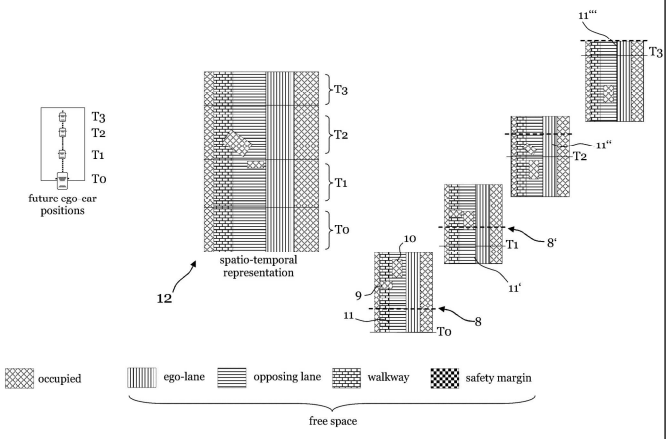
PCLO: 701001000*

Family

EP2950114	B1	JP2015228212	A
JP6650211	B2	US20150344031	A1
US9669830	B2	EP2950114	A1

(EP2950114)

The invention regards to a method for assisting a driver in driving a vehicle, comprising the steps of producing sensor data by at least one sensor physically sensing the environment of a host vehicle and/or obtaining data conveying information about the environment of a host vehicle, generating a plurality of representation segments each segment being a portion of an entire area of representation of the environment of the host vehicle at a particular point in time wherein a relative position of the portion of such representation segment with respect to a current position of the host vehicle corresponds to a possible position of the host vehicle at that particular point in time, combining the representation segments to a spatio-temporal representation of the environment of the host vehicle; evaluating the spatio-temporal representation and outputting an assistance signal on the basis of an evaluation result.



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HONDA

Method and system for predictive lane change assistance, program software product and vehicle

EP2942765 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

SCHMÜDDERICH JENS
REBHAHN SVEN
WEISSWANGE THOMAS
KLEINEHAGENBROCK MARCUS

Filing date: 2014-05-07

Granting Date: 2018-12-26

IPC - International classification

B60Q-009/00*	B60R-021/00	B60W-010/06
B60W-010/18	B60W-010/20	B60W-030/12
B60W-030/14	B60W-030/16	B60W-030/18
B60W-050/14	B62D-015/02	G01S-019/13
G08G-001/16*		

CPC - Cooperative classification

B60Q-009/00	B60W-010/06	B60W-010/18
B60W-010/20	B60W-030/12	B60W-030/14
B60W-030/16	B60W-030/18/163	B60W-050/14
B60W-2420/42	B60W-2554/00	B60W-2556/50
B62D-015/02/55*	B62D-015/02/6	G01S-019/13
G08G-001/16/7		

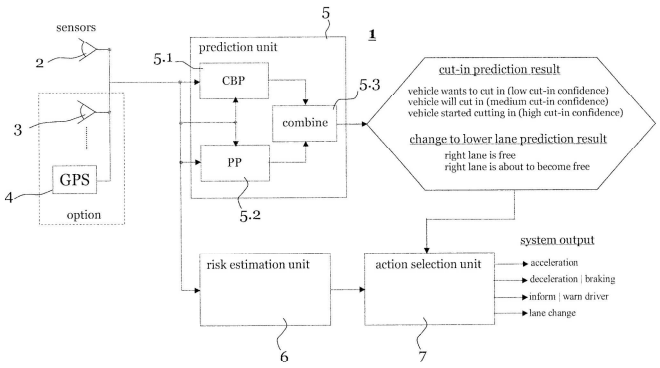
PCL - US patent classification

PCLO: 701023000*

Family

JP6614777	B2	JP2015215873	A
EP2942765	B1	US20150321699	A1
US9669872	B2	EP2942765	A1

The invention relates to a system and method for assisting a driver of a host vehicle in potential lane change situations, corresponding software product and vehicle. The method comprises the steps of producing sensor data by at least one sensor physically sensing the environment of the host vehicle, predicting future movement behavior of at least one sensed vehicle and determining whether a gap on a neighboring lane of the host vehicle exists. If the neighboring lane of the host vehicle would fit better for the predicted future movement behavior, a recommendation information signal regarding feasibility of a lane change of the host vehicle to this better fitting lane is generated, the feasibility being determined by computationally combining the determination result of the existence of a gap and the predicted future movement behavior. A notification for the host vehicle's driver is output and/or, in case that a lane change is feasible, signals for performing an autonomous lane change on the basis of the recommendation information signal by the host vehicle are output.



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HONDA

Driver assistance system

EP2746126 B1

Current assignees

HONDA RESEARCH INSTITUTE EUROPE*

Inventors

GOERICK CHRISTIAN

Filing date: 2012-12-18

Granting Date: 2019-04-10

IPC - International classification

B60R-021/00	B60T-007/22	B60W-030/09
B60W-030/095	B60W-050/00*	B60W-050/16
G01C-022/00	G05D-001/00	G08G-001/16

CPC - Cooperative classification

B60R-021/00*	B60T-007/22	B60T-2201/022
B60T-2201/024	B60W-030/09	B60W-030/095
B60W-050/00/97	B60W-050/16	Y02T-010/84

Family

EP2746126	B1	JP2014120158	A
US9446729	B2	EP2746126	A1
JP5792267	B2	US20140172226	A1

(EP2746126)

The invention provides a driver assistance method, comprising comprising the steps of: sensing a vehicle's state and the environment, on the basis of sensing output signals, determining whether a critical state of the vehicle is to be expected in the future, if yes, determining a total amount and a time duration of an activation of at least one vehicle actuator required in order to avoid occurrence of the critical state, the activation being of a nature which can be sensed by the driver of the vehicle, and partially performing, by a control module, the activation, i.e. for a portion of the amount and/or a portion of the time duration of the determined total amount and time duration.