

Title (en)

METHOD FOR DETERMINING A TRAJECTORY OF A MOTOR VEHICLE

Title (de)

VERFAHREN ZUM BESTIMMEN EINER TRAJEKTORIE EINES KRAFTFAHRZEUGS

Title (fr)

PROCÉDÉ DE DÉTERMINATION D'UNE TRAJECTOIRE D'UN VÉHICULE AUTOMOBILE

Publication

EP 4185504 A1 20230531 (FR)

Application

EP 21742847 A 20210721

Priority

- FR 2007743 A 20200723
- EP 2021070320 W 20210721

Abstract (en)

[origin: WO2022018110A1] The invention relates to a method for determining a trajectory of a motor vehicle (100) characterised in that it comprises the steps of: - identifying a plurality of objects (101, 102, 200, 201, 300) present in the surroundings of the motor vehicle (100), - for each object: a) determining a speed of impact between the object of interest and the motor vehicle, b) determining a risk of injury in the event of a collision with the motor vehicle at the determined impact speed, c) determining the probability of a collision resulting in an injury between the object of interest and the motor vehicle, depending on the determined risk of injury, subsequently - determining a plurality of possible trajectories for the motor vehicle, and - determining the trajectory to be followed by the motor vehicle by optimising a cost function which depends on the determined collision probabilities and which minimises the risk of collision resulting in an injury between each object and the motor vehicle.

IPC 8 full level

B60W 30/095 (2012.01); **B60W 40/04** (2006.01); **B60W 50/00** (2006.01); **B60W 50/14** (2020.01); **B60W 60/00** (2020.01); **G08G 1/16** (2006.01)

CPC (source: EP US)

B60W 30/09 (2013.01 - US); **B60W 30/095** (2013.01 - EP); **B60W 30/0953** (2013.01 - US); **B60W 30/0956** (2013.01 - US);
B60W 40/04 (2013.01 - EP); **B60W 50/0097** (2013.01 - EP); **B60W 50/14** (2013.01 - EP); **B60W 50/16** (2013.01 - US);
B60W 60/0015 (2020.02 - EP US); **G08G 1/166** (2013.01 - EP); **B60W 2050/0013** (2013.01 - EP); **B60W 2050/146** (2013.01 - US);
B60W 2554/80 (2020.02 - US); **B60W 2554/802** (2020.02 - EP)

Citation (search report)

See references of WO 2022018110A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2022018110 A1 20220127; EP 4185504 A1 20230531; FR 3112746 A1 20220128; FR 3112746 B1 20221111; US 2023365131 A1 20231116

DOCDB simple family (application)

EP 2021070320 W 20210721; EP 21742847 A 20210721; FR 2007743 A 20200723; US 202118006481 A 20210721