

Title (en)

METHOD AND PARAMETER MODULE FOR DETECTING THE TYPE AND/OR SEVERITY OF A COLLISION OF A VEHICLE WITH A COLLISION OBJECT.

Title (de)

VERFAHREN UND PARAMETERMODUL ZUR ERKENNUNG VON ART UND/ODER SCHWERE EINER KOLLISION EINES FAHRZEUGS MIT EINEM KOLLISIONSOBJEKT

Title (fr)

PROCÉDÉ ET MODULE PARAMÉTRIQUE PERMETTANT DE DÉTECTER LE TYPE ET/OU LA SÉVÉRITÉ D'UNE COLLISION ENTRE UN VÉHICULE ET UN OBJET IMPLIQUÉ DANS LA COLLISION

Publication

EP 3544862 A1 20191002 (DE)

Application

EP 17778284 A 20171004

Priority

- DE 102016223541 A 20161128
- EP 2017075154 W 20171004

Abstract (en)

[origin: WO2018095626A1] Method for detecting the type and/or severity of a collision of a vehicle (1) with a first mass (m1) with a collision object (2) of a second mass (m2) in an early phase of the collision in order to trigger suitable safety measures comprising the following steps: acquisition of surroundings data on the surroundings of the vehicle (1), detection and determination of the location of the collision object (2) from the surroundings data, extraction of at least one reference feature (4), not lying in a direct collision area (5), of the collision object (2) for the further observation of a relative speed (Vr) between the reference feature (4) of the collision object (2) and the vehicle (1), repeated successive determination of a current speed (V1, n) of the vehicle (1) and determination of a change in the speed of the vehicle (Delta V1), repeated successive determination of a current relative speed (Vr,n) between the vehicle (1) and reference feature (4), and determination of a change in the speed of the collision object (Delta Vr), estimation of a mass ratio (m1/m2), effective during the collision, between the mass (m1) of the vehicle (1) and the mass (m2) of the collision object (2) from the determined changes (Delta V1, Delta Vr) in the speeds of the vehicle (1) and of the collision object (2).

IPC 8 full level

B60R 21/0132 (2006.01); **B60R 21/0134** (2006.01); **B60R 21/0136** (2006.01); **B60R 21/015** (2006.01)

CPC (source: EP US)

B60R 21/0132 (2013.01 - EP US); **B60R 21/01332** (2014.12 - EP); **B60R 21/0134** (2013.01 - EP US); **B60R 21/0136** (2013.01 - EP US); **B60R 21/01558** (2014.10 - EP US); **B60R 2021/0004** (2013.01 - EP US)

Citation (search report)

See references of WO 2018095626A1

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

DOCDB simple family (publication)

DE 102016223541 A1 20180530; CN 110023149 A 20190716; EP 3544862 A1 20191002; JP 2019535587 A 20191212; US 2019344739 A1 20191114; WO 2018095626 A1 20180531

DOCDB simple family (application)

DE 102016223541 A 20161128; CN 201780073499 A 20171004; EP 17778284 A 20171004; EP 2017075154 W 20171004; JP 2019528541 A 20171004; US 201716349350 A 20171004