

## Title (en)

METHOD AND DRIVING ASSISTANCE SYSTEM FOR AVOIDING A COLLISION OF A VEHICLE WITH AN OBSTACLE

## Title (de)

VERFAHREN UND FAHRASSISTENZSYSTEM ZUM VERMEIDEN EINER KOLLISION EINES FAHRZEUGS MIT EINEM HINDERNIS

## Title (fr)

PROCÉDÉ ET SYSTÈME D'AIDE À LA CONDUITE POUR ÉVITER LA COLLISION D'UN VÉHICULE AVEC UN OBSTACLE

## Publication

**EP 3810476 A1 20210428 (DE)**

## Application

**EP 19733979 A 20190613**

## Priority

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- EP 2019065533 W 20190613

## Abstract (en)

[origin: WO2019243162A1] The invention relates to a method for avoiding a collision of a vehicle (10) with an obstacle (11) using at least one ultrasonic sensor (12). In the method, reflection points (14) are determined during a movement of the vehicle (10), wherein the reflection points (14) represent locations at which a signal of an ultrasonic sensor (12) has been reflected. The reflection points (14) are combined to form coherent, linearing extending wall sections (20), wherein one wall section (20) has two ends. In addition, it is determined whether an end of a wall section (20) is open or closed. The course adjoining an open end (24) of a wall section (20) is extrapolated, and virtual collision points (32) between the vehicle (10) and the extrapolated wall sections (20) are determined. This is followed by the initiation of a braking intervention if there is a risk of a collision with a virtual collision point (32). Further aspects of the invention relate to a driving assistance system having at least one ultrasonic sensor (12) which is configured to execute the method, and to a vehicle (10) having such a driving assistance system.

## IPC 8 full level

**B60W 50/00** (2006.01); **B60W 30/09** (2012.01); **B60W 30/095** (2012.01); **G01S 13/931** (2020.01); **G01S 15/89** (2006.01); **G01S 15/931** (2020.01)

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**B60W 30/09** (2013.01 - EP US); **B60W 30/095** (2013.01 - EP); **B60W 50/0097** (2013.01 - EP); **G01S 7/539** (2013.01 - EP); **G01S 13/931** (2013.01 - EP); **G01S 15/876** (2013.01 - EP); **G01S 15/89** (2013.01 - EP); **G01S 15/931** (2013.01 - EP US); **G08G 1/16** (2013.01 - US); **B60W 2420/54** (2013.01 - EP US); **B60W 2520/06** (2013.01 - US); **B60W 2530/201** (2020.02 - US); **B60W 2552/30** (2020.02 - US); **B60W 2554/801** (2020.02 - US); **B60W 2554/802** (2020.02 - US); **G01S 2013/9314** (2013.01 - EP); **G01S 2013/93185** (2020.01 - EP); **G01S 2013/9324** (2020.01 - EP)

## Citation (search report)

See references of WO 2019243162A1

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## DOCDB simple family (application)

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