

Title (en)
SYSTEM AND METHOD FOR DETECTING A RISK OF COLLISION BETWEEN A MOTOR VEHICLE AND A SECONDARY OBJECT LOCATED IN THE TRAFFIC LANES ADJACENT TO SAID VEHICLE WHEN CHANGING LANES

Title (de)
SYSTEM UND VERFAHREN ZUR ERKENNUNG EINES KOLLISIONSRISIKOS ZWISCHEN EINEM KRAFTFAHRZEUG UND EINEM SEKUNDÄREN OBJEKT, DAS SICH IN DEN AN DAS FAHRZEUG ANGRENZENDEN FAHRSPUREN BEIM FAHRSPURWECHSEL BEFINDET

Title (fr)
SYSTÈME ET PROCÉDÉ DE DÉTECTION D'UN RISQUE DE COLLISION ENTRE UN VÉHICULE AUTOMOBILE ET UN OBJET SECONDAIRE SITUÉ SUR LES VOIES DE CIRCULATION ADJACENTES AUDIT VÉHICULE LORS D'UN CHANGEMENT DE VOIE

Publication
EP 3749561 A1 20201216 (FR)

Application
EP 18830236 A 20181218

Priority
• FR 1851054 A 20180208
• EP 2018085612 W 20181218

Abstract (en)
[origin: WO2019154549A1] The invention relates to a method for detecting a risk of collision between a motor vehicle and a secondary object located in traffic lanes adjacent to the main traffic lane of said motor vehicle, in the event of a lane change by said vehicle, which involves detecting the presence of objects in a predetermined danger zone (Z), and estimating a time-to-collision (TTC) between the vehicle and a detected object. Detecting the presence of objects in a danger zone (Z) involves: calculating the actual distance (LAB) between the motor vehicle and each object detected by the radar resulting from a transformation of the distance (X) transmitted by the radar corresponding to the distance in a straight line between the motor vehicle and each object detected by the radar, the actual distance (LAB) corresponding to the length of an arc between two points; determining a danger zone (Z) as a function of the lines of the main traffic lane and the width of the main traffic line; and checking, for each object detected by the radar, whether its coordinates (LAB, Y) are inside the predetermined danger zone (Z).

IPC 8 full level
B60W 30/09 (2012.01); **B60R 21/013** (2006.01); **B60W 30/08** (2012.01); **B60W 30/095** (2012.01); **G08G 1/16** (2006.01)

CPC (source: EP KR US)
B60R 21/013 (2013.01 - EP KR); **B60R 21/0132** (2013.01 - US); **B60W 30/08** (2013.01 - EP KR); **B60W 30/09** (2013.01 - EP US); **B60W 30/095** (2013.01 - EP); **B60W 30/0953** (2013.01 - US); **B60W 30/18163** (2013.01 - KR); **B60W 40/06** (2013.01 - KR); **B60W 50/14** (2013.01 - KR US); **G01S 13/931** (2013.01 - KR); **G08G 1/165** (2013.01 - EP KR); **G08G 1/166** (2013.01 - EP KR); **G08G 1/167** (2013.01 - EP KR); **B60R 2021/01327** (2013.01 - US); **B60W 2050/0052** (2013.01 - KR); **B60W 2420/408** (2024.01 - EP KR US); **B60W 2552/00** (2020.02 - EP); **B60W 2552/30** (2020.02 - EP KR); **B60W 2552/50** (2020.02 - US); **B60W 2554/80** (2020.02 - EP KR US); **B60W 2554/802** (2020.02 - US); **B60W 2554/804** (2020.02 - US); **B60Y 2300/18166** (2013.01 - KR); **B60Y 2400/90** (2013.01 - KR)

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)
FR 3077547 A1 20190809; BR 112020013885 A2 20201201; CN 111712415 A 20200925; EP 3749561 A1 20201216; JP 2021513159 A 20210520; JP 7279053 B2 20230522; KR 20200115640 A 20201007; US 11577721 B2 20230214; US 2021053560 A1 20210225; WO 2019154549 A1 20190815

DOCDB simple family (application)
FR 1851054 A 20180208; BR 112020013885 A 20181218; CN 201880088968 A 20181218; EP 18830236 A 20181218; EP 2018085612 W 20181218; JP 2020542306 A 20181218; KR 20207025635 A 20181218; US 201816964790 A 20181218