

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

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Application

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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

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