

Title (en)

SYSTEM AND METHOD FOR AUTOMATED LANE CHANGE CONTROL FOR AUTONOMOUS VEHICLES

Title (de)

SYSTEM UND VERFAHREN ZUR AUTOMATISCHEN SPURWECHSELSTEUERUNG FÜR AUTONOME FAHRZEUGE

Title (fr)

SYSTÈME ET PROCÉDÉ POUR COMMANDE DE CHANGEMENT DE VOIE AUTOMATISÉE POUR VÉHICULES AUTONOMES

Publication

EP 3758998 A1 20210106 (EN)

Application

EP 19788382 A 20190405

Priority

- US 201815946171 A 20180405
- US 2019025995 W 20190405

Abstract (en)

[origin: WO2019204053A1] A system and method for automated lane change control for autonomous vehicles are disclosed. A particular embodiment is configured to: receive perception data associated with a host vehicle; use the perception data to determine a state of the host vehicle and a state of proximate vehicles detected near to the host vehicle; determine a first target position within a safety zone between proximate vehicles detected in a roadway lane adjacent to a lane in which the host vehicle is positioned; determine a second target position in the lane in which the host vehicle is positioned; and generate a lane change trajectory to direct the host vehicle toward the first target position in the adjacent lane after directing the host vehicle toward the second target position in the lane in which the host vehicle is positioned.

IPC 8 full level

B60W 30/10 (2006.01)

CPC (source: EP)

B60W 30/09 (2013.01); **B60W 30/0956** (2013.01); **B60W 30/18163** (2013.01); **B60W 60/0015** (2020.02); **B60W 60/00276** (2020.02);
B62D 15/0255 (2013.01); **B60W 2420/403** (2013.01); **B60W 2420/408** (2024.01); **B60W 2554/4041** (2020.02); **B60W 2554/4042** (2020.02);
B60W 2554/4044 (2020.02); **B60W 2554/802** (2020.02); **B60W 2556/50** (2020.02)

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)

WO 2019204053 A1 20191024; AU 2019257245 A1 20201015; CN 112154088 A 20201229; CN 112154088 B 20240524;
EP 3758998 A1 20210106; EP 3758998 A4 20211201

DOCDB simple family (application)

US 2019025995 W 20190405; AU 2019257245 A 20190405; CN 201980033896 A 20190405; EP 19788382 A 20190405