

Title (en)

DEVICES SYSTEMS AND METHODS FOR VEHICLE MONITORING AND PLATOONING

Title (de)

VORRICHTUNGEN, SYSTEME UND VERFAHREN ZUR FAHRZEUGÜBERWACHUNG UND -KOLONNENBILDUNG

Title (fr)

DISPOSITIFS, SYSTÈMES ET PROCÉDÉS DE SURVEILLANCE ET DE MISE EN CONVOI DE VÉHICULES

Publication

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Application

EP 16840242 A 20160826

Priority

- US 201562210374 P 20150826
- US 201562249898 P 20151102
- US 201662343819 P 20160531
- US 201662363192 P 20160715
- US 201662377970 P 20160822
- US 2016049143 W 20160826

Abstract (en)

[origin: WO2017035516A1] Systems and methods for coordinating and controlling vehicles, for example heavy trucks, to follow closely behind each other, or linking to form a platoon, in a convenient, safe manner and thus to save significant amounts of fuel while increasing safety. In an embodiment, on-board controllers in each vehicle interact with vehicular sensors to monitor and control, for example, relative distance, relative acceleration/deceleration, and speed. Various data is supplied by the vehicle's onboard systems to a Network Operations Center, and, in some embodiments, suggestions of vehicles for platooning are received from the NOC based on travel forecasts and an analysis of the relevant roadways to identify platoonable roadway segments. The NOC can also provide traffic, roadway, weather or system updates as well as various instructions. In some embodiments, a mesh network capability is provided for ensuring improved communication among vehicles and with the NOC.

IPC 8 full level

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Citation (search report)

- [I] US 2014303870 A1 20141009 - SWITKES JOSHUA P [US], et al
- [I] WO 2013165297 A1 20131107 - SCANIA CV AB [SE]
- [T] MAXIM RAYA ET AL: "Securing vehicular ad hoc networks", JOURNAL OF COMPUTER SECURITY, vol. 15, no. 1, 1 January 2007 (2007-01-01), NL, pages 39 - 68, XP055542325, ISSN: 0926-227X, DOI: 10.3233/JCS-2007-15103
- [T] SANDRO RAFAELI ET AL: "A survey of key management for secure group communication", ACM COMPUTING SURVEYS (CSUR), 1 September 2003 (2003-09-01), Baltimore, pages 309 - 329, XP055542318, Retrieved from the Internet <URL:http://www.iet.unipi.it/g.dini/Teaching/snscs/lectures/readers/Survey-Key-Management-Secure-Groups.pdf> DOI: 10.1145/937503.937506
- See references of WO 2017035516A1

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