Title (en)
CONTROL AND MANAGE TRAFFIC LIGHT SYSTEM WITH VANET

Title (de)
STEUERUNG UND VERWALTUNG EINES AMPELSYSTEMS MIT VANET

Title (fr)
COMMANDE ET GESTION D'UN SYSTÈME DE FEUX DE CIRCULATION AVEC DES VANET

Publication
**EP 3465657 A4 20200527 (EN)**

Application
**EP 16902617 A 20160524**

Priority
CA 2016050582 W 20160524

Abstract (en)
[origin: WO2017201600A1] The programming of traffic lights systems (TLS) in cities is a complex optimization problem. The main problem of the actual process is that this is a long, expensive and imprecise process that must be repeated regularly to reflect changes in traffic flow. The invention consists of using Vehicular's ad hoc networks (VANET) to collect traffic data in real time and transmit them to a traffic management system. VANET is defined by the IEEE 802.11p standard. We propose to use VANET in correlation with others techniques to achieve better control of TLS. This invention will permit to manage the entire network in real-time of a city and it will be possible to be used for urban planning studies, transport planning or to simulate the exit of special events (sporting, cultural, parades, etc.). It also allows programming TLS in real time with any efficient algorithm that exists or to be developped.

IPC 8 full level
**G08G 1/08** (2006.01); **G08G 1/01** (2006.01); **G08G 1/081** (2006.01); **G08G 1/095** (2006.01); **G08G 1/0967** (2006.01); **H04W 84/18** (2009.01)

CPC (source: EP KR)
**G08G 1/0112** (2013.01 - EP KR); **G08G 1/0129** (2013.01 - EP KR); **G08G 1/0145** (2013.01 - EP KR); **G08G 1/08** (2013.01 - EP KR); **G08G 1/081** (2013.01 - EP); **G08G 1/095** (2013.01 - KR); **G08G 1/096716** (2013.01 - EP); **G08G 1/096725** (2013.01 - EP); **G08G 1/096741** (2013.01 - EP); **G08G 1/09675** (2013.01 - EP); **G08G 1/096775** (2013.01 - EP); **H04W 84/18** (2013.01 - KR); G08G 1/095 (2013.01 - EP); H04W 84/18 (2013.01 - EP)

Citation (search report)
- [I] US 2014278026 A1 20140918 - TAYLOR DONALD WARREN [US]
- [XDI] FRANCOIS VAUDRIN ET AL: "SUMO 2016 - Trafic, Mobility, and Logistics", PROCEEDINGS OF THE SUMO2016, 8 April 2016 (2016-04-08), Berlin, pages 115 - 125, XP055686040, Retrieved from the Internet <URL:https://elib.dlr.de/106342/1/SUMOconference_proceedings_2016.pdf> [retrieved on 20200415]
- [I] NAZMUS S NAFI ET AL: "A VANET based Intelligent Road Traffic Signalling System", TELECOMMUNICATION NETWORKS AND APPLICATIONS CONFERENCE (ATNAC), 2012 AUSTRALASIAN, IEEE, 7 November 2012 (2012-11-07), pages 1 - 6, XP032293687, ISBN: 978-1-4673-4408-1, DOI: 10.1109/ATNAC.2012.6398066
- [I] MAYTHEM KAMAL ABBAS ET AL: "Traffic light control via VANET system architecture", WIRELESS TECHNOLOGY AND APPLICATIONS (ISWTA), 2011 IEEE SYMPOSIUM ON, IEEE, 25 September 2011 (2011-09-25), pages 174 - 179, XP032028735, ISBN: 978-1-4577-1496-2, DOI: 10.1109/ISWTA.2011.6089403
- See also references of WO 2017201600A1

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

DOCDB simple family (publication)
**WO 2017201600 A1 20171130**; CN 110140157 A 20190816; EP 3465657 A1 20190410; EP 3465657 A4 20200527; JP 2019526092 A 20190912; KR 20190016040 A 20190215

DOCDB simple family (application)
**CA 2016050582 W 20160524**; CN 201680086139 A 20160524; EP 16902617 A 20160524; JP 2018561702 A 20160524; KR 20187037406 A 20160524