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[Continued on next page]

(54) Title: A CONTROL SYSTEM AND A METHOD FOR INFORMATION DISPLAY SYSTEMS FOR VEHICLES ON CROSS ROADS

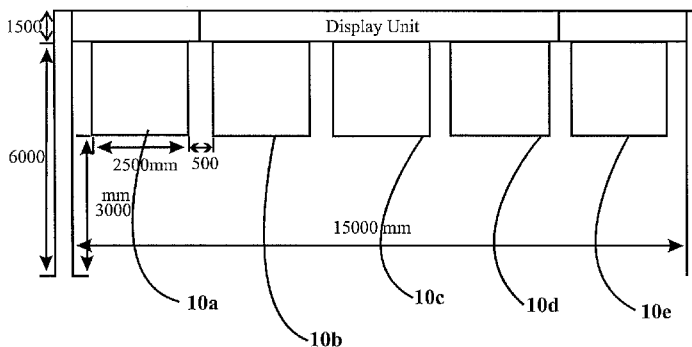


Fig. 1

(57) Abstract: The various embodiments herein provide a system and method for managing information display for vehicles on cross roads. The system includes at least one panel to display a traffic regulatory information and advertisements, a central server, a programmable logic controller (PLC) connected to the central server, a plurality of sensors to detect the at least one panel position and any moving foreign objects. A display unit is managed online from a traffic control centre to receive and display a real-time traffic information and a plurality of timers are provided for calculating a time schedule information of the traffic lights based on the traffic. The sensors control and transmit the time schedule information to the PLC. The time schedule information and traffic algorithms are transmitted by the PLC to a central control system for processing and estimating an optimum time schedule of traffic lights.





— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

International application No PCT/EP2011/052660

A. CLASSIFICATION OF SUBJECT MATTER				
INV. G08G1/096 G09F19/02 G09F19/22 G08G1/08 G08G1/09				
G08G1/095 E01F9/019				
ADD.				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols) G08G G09F				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	EP 1 930 861 A1 (MUSALLAM IBRAHIM [SA]) 11 June 2008 (2008-06-11) abstract paragraphs [0001], [0003], [0005], [0010] - [0012], [0014] - [0016], [0-31], [0036] - [0038], [0049] claims 1-5,7-14,16-18; figures 1,2 -----	1-3,5,6, 9,10, 15-20		
Y	NL 8 802 970 A (TRAFFIC INTELLIGENCE V O F I O) 2 July 1990 (1990-07-02) the whole document -/--	1-3,5,6, 9,10, 15-20		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; border: none; vertical-align: top;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family </td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family			
Date of the actual completion of the international search	Date of mailing of the international search report			
26 April 2012	04/05/2012			
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Quartier, Frank			

7

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2011/052660

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	& DATABASE EPODOC [Online] EUROPEAN PATENT OFFICE, THE HAGUE, NL; 2 July 1990 (1990-07-02), "Traffic signal with versatile visual display unit - is physically steered to direct display towards intended viewers", XP002641606, Database accession no. NL-8802970-A abstract	
A	----- DE 203 09 251 U1 (NEBEL KRISTIN [DE]) 11 September 2003 (2003-09-11) the whole document	1,2,5,6, 9,10, 15-20
A	----- EP 2 063 406 A1 (WABCO GMBH [DE]) 27 May 2009 (2009-05-27) abstract paragraphs [0008] - [0011] claims 1,10,11	1,2,5,6, 9,10, 15-20
Y	----- WO 92/01838 A1 (ATA BYY MARKPROD AB [SE]) 6 February 1992 (1992-02-06) abstract page 1, line 36 - page 3, line 2 page 3, lines 23-28 page 3, line 36 - page 4, line 2 claims 1,3,5-8 figures 1,2	3,6-8, 11-15
Y	----- US 3 131 425 A (JACOBS WILLIAM A ET AL) 5 May 1964 (1964-05-05) figure 1 column 2, lines 11-35 column 2, line 65 - column 3, line 2 column 4, lines 37-44	3,6-8, 11-15
Y	----- US 2010/018097 A1 (XU PEIYUAN [CN]) 28 January 2010 (2010-01-28) abstract figures 2,3 paragraphs [0002], [0004] - [0007], [0012] - [0015], [0043], [0068], [0069] claims 1-4	3,6-8, 11-15
A	----- US 2003/051410 A1 (CLOUTIER HERMEL R [CA]) 20 March 2003 (2003-03-20) abstract figures 1-3 paragraphs [0002], [0008], [0009], [0013], [0042], [0044], [0057] claims 1,10	3,6-8, 11-15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2011/052660

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

2, 3, 5, 7-20(completely); 1, 6(partially)
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 2, 5, 9, 10, 16-20(completely); 1, 6, 15(partially)

System and method for signalling the position of at least one information panel

2. claims: 4(completely); 1(partially)

Display unit managed online from a traffic control centre to display real-time traffic information obtained by a plurality of cameras

3. claims: 1, 6(all partially)

System comprising a plurality of timers for calculating a time schedule information of traffic lights based on a traffic condition, wherein a plurality of sensors controls the time schedule information and transmits the time schedule information to the PLC which further transmits the time schedule information and traffic algorithms to a central control system residing in the central server in an online mode for processing and displaying an information on the panel to avoid a probable traffic jam on adjacent cross roads

4. claims: 3, 7, 8, 11-14(completely); 6, 15(partially)

System comprising a movement control mechanism for a vertical movement of at least one panel

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2011/052660

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
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