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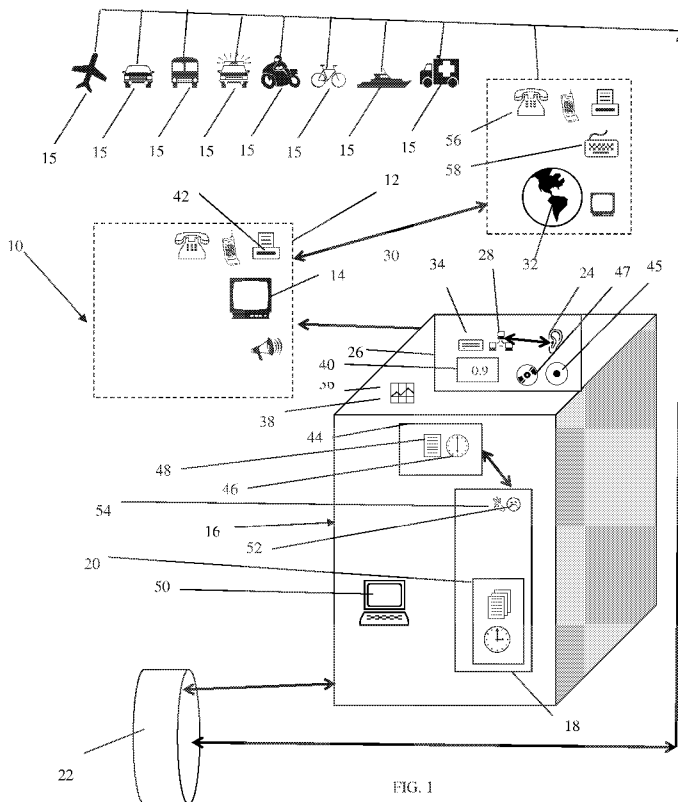
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR REAL TIME SCHEDULING



(57) Abstract: The present invention relates to Real Time Scheduling systems. In particular, the present invention relates to real time transportation scheduling. More specifically, the present invention relates to novel improvements in transportation planning and allocation of resources on a real time basis by providing a system and method for "real time" scheduling including a client interface, a real time data processor for creating a prediction, an optimization engine electronically attached to the client interface and the real time data processor for readily producing a new schedule, and a transportation means electronically attached to the optimization engine and responsive to the new schedule.

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SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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A. CLASSIFICATION OF SUBJECT MATTER
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 CPC - G01C 21/34; G01C 21/343; G05D 1/00; G05D 1/0005; G06Q 10/04; G06Q 10/047 (2016.08)
 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)
 IPC - G01C 21/34; G05D 1/00; G06Q 10/04; G06Q 10/08; G07C 5/00; G08G 1/123; G08G 1/127; G08G 1/13; G08G 1/133
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC - 701/23.000; 701/25.000; 701/26.000; 701/29.400; 701/29.100; 701/31.500; 701/31.400; 701/410.000; 701/465.000 (keyword delimited)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Orbit, Google Patents, Google Scholar, Google, Directory of Open Access Journals
 Search terms used: real time, dynamic, automatic, schedule, optimize, predict, vehicle, car, truck, plane, airplane, boat, automobile, telemetry, new, update, revise, change, predict, forecast, anticipate, dataset, history, planning, speed, tire pressure, oil pressure, acceleration, position, location, temperature, GPS, map, feed, stream, probability

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,240,362 B1 (GASPARD, II) 29 May 2001 (29.05.2001) entire document	1-8, 12-14 --- 9-11, 15-20
Y	US 2014/0371951 A1 (MICHAEL et al) 18 December 2014 (18.12.2014) entire document	9-11
Y	US 8,027,849 B2 (JOHNSON et al) 27 September 2011 (27.09.2011) entire document	15-20
A	US 20100299177 A1 (BUCZKOWSKI et al) 25 November 2010 (25.11.2010) entire document	1-20
A	FU et al. Real-Time Optimization Model for Dynamic Scheduling of Transit Operations. Transportation Research Record; 48-55, 2003. [retrieved on 28.10.2016]. Retrieved from the Internet. <URL:http://www.civil.uwaterloo.ca/TSS/papers%5C2003-1%20(Real-Time%20Optimization%20Model%20for%20Transit).pdf>. entire document	1-20
A	US 6,937,853 B2 (HALL) 30 August 2005 (30.08.2005) entire document	1-20
A	US 7,624,024 B2 (LEVIS et al) 24 November 2009 (24.11.2009) entire document	1-20
A	LIN et al. Experimental Study of Real-Time Bus Arrival Time Prediction with GPS Data. Transportation Research Record; 101-109, 1999. [retrieved on 28.11.2016]. Retrieved from the Internet. <URL:http://floridaapts.eng.fiu.edu/pdf/Study%20on%20Real-time%20Bus%20Arrival%20with%20GPS%201999.pdf>. entire document	1-20
A	US 8,260,650 B2 (MILLER) 04 September 2012 (04.09.2012) entire document	1-20

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"A" document defining the general state of the art which is not considered to be of particular relevance	"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
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"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	"&" document member of the same patent family

Date of the actual completion of the international search 06 December 2016	Date of mailing of the international search report 19 JAN 2017
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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,480,783 B1 (MYR) 12 November 2002 (12.11.2002) entire document	1-20
A	PILLAC et al. An event-driven optimization framework for dynamic vehicle routing. Decision Support Systems; Vol. 54, Iss. 1; 414-423, 2012. [retrieved on 28.11.2016]. Retrieved from the Internet. <URL:https://hal.archives-ouvertes.fr/hal-00623479/document>. entire document	1-20
A	US 8,489,085 B2 (SIMMONS) 16 July 2013 (16.07.2013) entire document	1-20
A	WO 2014075108 A2 (THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK) 15 May 2014 (15.05.2014) entire document	1-20