GTU - Project Monitoring and Mentoring System

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PSAR Details

PSAR No. : 20BE7_170130107020_1

Part - I : PATENT SEARCH TECHNIQUE USED

1. Patent Search Database Used	:	Google Patents
Web link of the Database	:	https://patents.google.com/
2. Keywords Used for Search	:	traffic ,prediction,system
3. Search String Used	:	traffic lights prediction system
4. Number of Results/Hits getting	:	5

Part - II : BASIC DATA OF PATENTED INVENTION/BIBLIOGRAPHIC DATA

5. Category/Field of Invention	:	
6. Invention is Related to/Class of Invention	:	Controlling traffic signals
6a. IPC class of the studied patent	:	G08G1/07
7. Title of Invention	:	Traffic light prediction system
8. Patent No.	:	US 7,187,301 B2
9. Application No.	:	10/894,922
9a. Web link of the studied patent	:	https://patents.google.com/patent/US7187301B2/en?oq=traffic+lights#title
10. Date of Filing/Application	:	07/20/2004
11. Priority Date	:	
12. Publication/Journal Number - (Issue No. of Journal in which Patent is published)	:	
13. Publication Date	:	
14. First Filled Country	:	

15. Also Published as

Country	Patent No
United States	US 7

16. Inventor

Name of Inventor	Address/City/Country of Inventor
Guixian Lu	Melrose Rd Pontiac MI US 48340

17. Applicant

Name of Applicant/Assignee	Address/City/Country of Applicant
Guixian Lu	Melrose Rd Pontiac MI US 48340

18. Applicant for Patent is : Individual

Part - III : TECHNICAL PART OF PATENTED INVENTION

19. Limitation of Prior Technology/Art :

The limitation to current technology is it only gives driver of the vehicle the information regarding the future traffic lights.
but the system won't optimize itself and adapt to current traffic situation to reduce the traffic.
Another limitation is to setup various different lights for different moving section which is not cost effective.

20. Specific Problem Solved/Objective of Invention :

primary objective of the present invention is to save fuel.
other objective are to save fuel to maximize the usage of streets,
and to reduce traffic accidents.

21. Brief about Invention :

A traffic system that helps a driver to save gasoline by avoiding red light or by decelerating before a red light. It predicts the colors of a traffic light and informs about the future traffic light colors that will happen to a driver. The system comprising a sub-control system, three kinds of moving sections representing three future colors: green, yellow, and red. The positions of the moving sections are showed by indicators. The indicators are secured along one side of the street.

22. Key Learning Points :

The idea here is creative but the cost required to make this is not proportional to the cost it saves.

23. Summary of Invention :

The primary objective of the present invention is to save fuel for vehicles and travel time. Other objectives are to reduce pollution from vehicles, to maximize the usage of the streets, and to reduce traffic accidents and traffic jams.

The forgoing objectives are accomplished by defining moving sections on a street, moving towards the traffic light. Usually each kind of moving section represents one future color from the traffic light. Green sections will result in arriving to a green light. Red section will result in arriving to a red light. There are Indicators informing the drivers about the locations and colors of the moving sections. Some small lights, may act as Indicators. The drivers will know how to change the speed in order to shift from a red section to a green section.

24. Number of Claims : 10

25. Patent Status : Expired Patent

26. How much this invention is related with your IDP/UDP? : < 70 %

27. Do you have any idea to do anything around the said invention to improve it? :

Instead of using lights as indicator for the future traffic lights there should be a system which can broadcast signal directly to system in your car or phone. which will make this cost effective. Other than that it would be better if the system adapts to current traffic condition to reduce traffic jams and save waiting time on traffic lights.