

(12) INNOVATION PATENT
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(54) Title

Invention : 3green 3 Green is an integrated software application that links an individuals GPS enabled mobile device with data from a traffic control substation enabling the operator of a motor vehicle to adjust the speed of their vehicle to optimize their opportunity of only encountering green traffic signals Cars idling, motionless at traffic lights and then having to accelerate up to speed again wastes billions of dollars worth fuel. Initial computer modelling suggests a fuel saving of up to 40% for a standard passenger vehicle travelling 10km.

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Abstract (57)

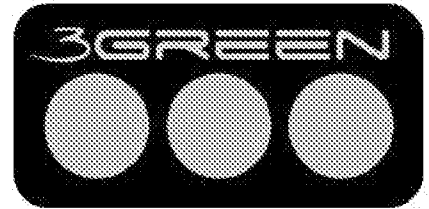
An integrated software application that allows direct communication between a portable GPS enabled device and a traffic control substation, which divides the road up into "traffic cells" and provides an indicator to advise a user about what speed their vehicle should be travelling to enable them to move into one of these cells. The traffic cells represent moving areas on the road that correspond to where a moving vehicle needs to be in order to encounter green traffic signals.

Editorial Note

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There is one page only of description

Invention Description: 3green
Integrated Software Application



3 green solves the problem of cars having to constantly having stop at traffic signals in a metropolitan area. Cars idling, motionless at traffic lights and then having to accelerate up to speed again wastes billions of dollars' worth of fuel. 3green allows the driver of a motor vehicle to adjust their speed thus minimising the amount of red traffic signals they encounter. Initial computer modelling suggests a fuel saving of up to 40% for a standard car travelling 10km.

In addition to the fuel saving received by anyone using 3green other advantageous effects of the invention include a massive benefit to the environment. 3green if adopted worldwide would prevent the release of billions of tons of CO₂, greenhouse gases and other toxic emissions and would save Australian motorists 375 million dollars per month.

3green will be available to the public in the form of a download-able software application designed for use on a mobile GPS enabled device. Using information direct from the traffic substations and GPS data about the location and speed of the user, 3green displays information to the motorist advising then about what speed their vehicle should be travelling to enable them to encounter a green signal at the next traffic intersection.

3green divides the road up into "traffic cells" and attempts the move vehicles connected to the system into these cells. The traffic cells represent moving areas on the road that correspond to where a moving vehicle needs to be in order to encounter a green traffic signal. These traffic cells are programed to travel at 10km/h below the posted speed limits

A red, green or blue colour is displayed indicating to the driver to either slow down, continue to travel at a constant speed or to speed up in order to maximise their opportunity of encountering a green traffic signal.

Universal implementation of the 3green system will substantially reduce the amount of times a vehicle has to stop when travelling from point A to point B in a metropolitan area. This in turn will save fuel, have a significant benefit to the environment and will also save lives because people are in general will travelling slower.

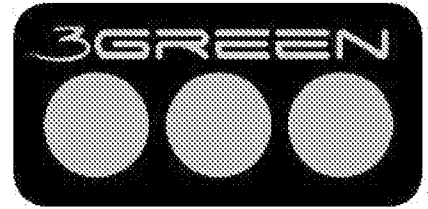
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Editorial Note

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Claims 3green



1. 3green is the first integrated software application that allows direct communication between a hand held GPS enabled device and a traffic control substation
2. The software operates by dividing the roads into a series of "traffic cells" that travel at 10km/h below the maximum speed limit for any section of public roads.
3. "Traffic cells" according to claim 2 will represent moving areas in which a motorist moving at a constant speed of 10km/h below the speed limit is guaranteed to encounter a green traffic signal.
3. A significantly greater efficiency in fuel usage is achieved for people using 3green as the software attempts to place motorists in a "traffic cell" ensuring they only encounter green traffic signals.
4. Every second the software calculates the position of a vehicle, it's velocity, the distance from the next intersection and how long until the traffic signal at the next intersection changes from green to red or vice versa and how long that signal will remain green or red.
5. Although 3green makes use of existing hardware, the software and the way it organises and manages traffic flow in a metropolitan area is unique because it accesses live information regarding the status of traffic signals and although other safety and environmental benefits will arise from it's use, 3green is primarily focused of improving the fuel efficiency of all vehicles travelling in a metropolitan area.