ABSTRACT

INTEGRATIVE SYSTEM AND METHODS TO APPLY PREDICTIVE DYNAMIC CITY-TRAFFIC LOAD BALANCING AND PERDICTIVE PARKING CONTROL THAT MAY FURTHER CONTRIBUTE TO COOPERATIVE SAFE DRIVING

Apparatuses, systems and methods applying incentive based non-discriminating and anonymous dynamic car navigation driven traffic load balancing, using DTA based model predictive control that dynamically assigns sets of routes to car navigation aids wherein sets of routes tend to converge to non- discriminating sets under said traffic load balancing control and wherein in-vehicle privacy preserving incentives enable anonymous load balancing operation without potential big brother syndrome. The system and methods enable to apply a new highly efficient proactive traffic control for a city or metropolitan road network while improving or substituting commercial navigation service solutions. The system and methods may further enable to protect from hostile anonymous usage of the system, and, by being supported by appealing incentives to encourage trustable requests for prescheduled trips, to contribute to predictive assignment of parking places to path controlled trips as well as to contribute to high quality predictive coordination of controlled trips.

Fig.1j1