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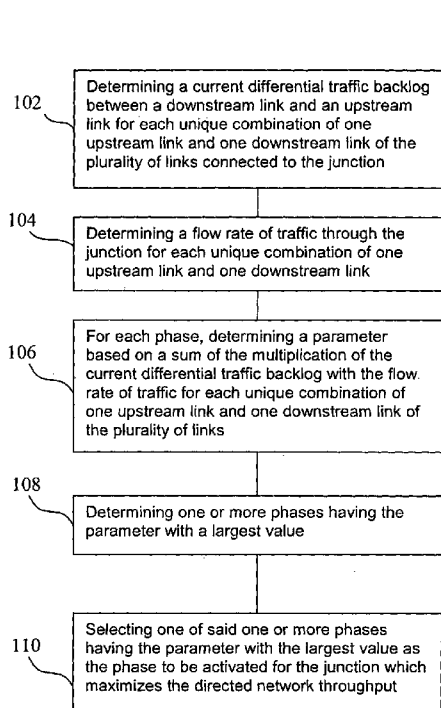
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(54) Title: TRAFFIC SIGNAL CONTROL METHOD AND TRAFFIC SIGNAL CONTROLLER



(57) Abstract: A distributed traffic signal control method is provided for a directed network comprising a plurality of junctions, each junction having a plurality of links connected thereto, the links comprising one or more upstream links and one or more downstream links, the method comprising: activating one of a plurality of phases of the junction for a predetermined time period which maximizes the directed network throughput based on current differential traffic backlogs between said one or more upstream links and said one or more downstream links, each phase providing a unique combination of traffic signals at the junction for guiding traffic from the upstream link(s) to the downstream link(s). There is also provided a corresponding traffic signal controller, a traffic control system comprising the traffic signal controller, and a computer readable medium having stored therein computer executable codes for instructing a computer processor to execute the distributed traffic signal control method.



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