Title (en)

FUZZY LOGIC-ASSISTED TRAFFIC-RESPONSIVE CONTROL SYSTEM FOR TRAFFIC LIGHT SYSTEMS

Title (de)

VERKEHRSABHÄNGIGE STEUERUNG VON VERKEHRS-LICHTSIGNALANLAGEN MIT HILFE VON FUZZY-LOGIK

Title (fr)

DISPOSITIF DE COMMANDE DEPENDANT DU TRAFIC, DE SYSTEMES DE FEUX DE SIGNALISATION, ASSISTE PAR LOGIQUE FLOU

Publication

EP 0886845 B1 20000112 (DE)

Application

EP 97916338 A 19970311

Priority

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Abstract (en)

[origin: WO9734274A1] The disclosure relates to a traffic-responsive control system for traffic light systems using a multistage modular fuzzy control (FS) comprising an observation level (BE) and a control level (SE). In the observation level (BE) the processed detector values and data on signal group states (DSD) are processed, e.g. every second, in a first stage with the aid of a data-bank module (DBM) to form compressed signal group-related data. From the latter, in a second stage using a green time requirement module (GBM) and a signal groups weighting module (SGGM), the required green times of individual signal groups and the signal group weightings are calculated. In a third stage in the control level (SE), using a signal/frame plan adaptation module (SRAM) and based on the green time requirement for the subsequent signal cycle, the signal/frame plan is adapted for the subsequent signal cycle, and switching recommendations (SED) for signal groups are generated in a signal group updating module (SGAM) based on the signal/frame plan and the signal group weightings, or alternatively, in a phase-updating module (PAM), the signal group weightings are converted to phase weightings for switching recommendations for the current and/or subsequent phase.

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G08G 1/08

IPC 8 full level

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