

Title (en)  
Intersection controller with command-phase signal groups and its method.

Title (de)  
Verkehrskontrollgerät für Strassenkreuzungen mit Steuerphasen-Signalgruppen und Verfahren.

Title (fr)  
Contrôleur de carrefours à groupes d'ordres-phases et son procédé.

Publication  
**EP 0038268 A1 19811021 (FR)**

Application  
**EP 81400595 A 19810414**

Priority  
FR 8008423 A 19800415

Abstract (en)  
1. A crossroads controller of the type comprising : on the one hand a series of power change-over switching members (30) for selectively feeding power to the lamps of the traffic control lights such as the three-colour green-amber-red lights for vehicles, in dependence on control orders referred to as phase orders each corresponding to a light or a group of lights, and on the other hand a central logic means for generating said phase orders and comprising a processing unit (12), a clock (10) defining a working rate for said processing unit, and memories comprising at least a read only memory (21) and a random access memory (23) serving as a working memory for the processing unit, the central logic means further comprising a frequency displacing circuit (11) which is separate from the processing unit and which is capable of supplying same with pulses with a base rate which is lower than the working rate of the processing unit, said base rate serving as a time standard for counting digitally defined operating durations, the memories comprising a first fixed memory unit (23) capable of co-operating with the processing unit for causing it to carry out a predetermined cycle of operations, and a second fixed memory unit (22) containing : information defining light plans, and a set of conditions for safety between the different phase orders, characterised in that : A) said second fixed memory unit also comprises : data in respect of groups of type sequences, comprising a group indication, a sequence indication and at least one duration for each sequence, data establishing a correspondence between each phase order and a group of type sequences, with the designation of certain of the type sequences of said group, wherein the phase order in question can go to green only for the whole of each type sequence designated, and data establishing a correspondence between some at least of the phase orders and reference phase orders, which is matched on each occasion with an associated difference period, B) each safety condition is defined by a period to be observed between the end of a state such as amber of one of the phase orders and the beginning of a state such as green of another phase order, C) in the repetitive cycle that it performs in response to the first fixed memory unit (12), the processing unit authorises the transition of a phase order to green only when all the safety period conditions provided with all the phase orders which have just left green are satisfied, D) in each group the processing unit starts off the following type sequence when all the associated phase orders are in the corresponding state, whereafter the duration of the type sequence is counted down, and the processing unit establishes the departure from green of a phase order on the double condition that the corresponding type sequence is completed and that the difference period with regard to the end of green of its reference phase order is observed.

Abstract (fr)  
L'invention concerne la commande de carrefours. Des séquences-types définies normalement par leur durée sont désignées par chaque ordre-phase. La fin de vert intervient en fin de séquence-type, sous réserve du respect de décalages (67) à l'écart de fins de vert antérieures. De son côté, la fin de rouge ne peut se faire qu'en respectant (74) des intervalles de sécurité à l'égard des débuts de rouge sur des ordres-phases antagonistes. Application à la circulation.

IPC 1-7  
**G08G 1/07**; **G06F 15/48**

IPC 8 full level  
**G08G 1/07** (2006.01); **G08G 1/08** (2006.01); **G08G 1/081** (2006.01)

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**G08G 1/081** (2013.01)

Citation (search report)  
• FR 2145427 A1 19730223 - FABR INSTR MESURE  
• FR 2344902 A1 19771014 - SFIM [FR]

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