

Title (en)

Circuit for monitoring an alternating current supplied light signal by direct voltages

Title (de)

Schaltung zum Überwachen eines wechselstromgespeisten Lichtsignals mittels Gleichspannungen

Title (fr)

Circuit pour la surveillance avec tensions continues d'un signal lumineux alimenté en courant alternatif

Publication

EP 0432626 B1 19960327 (DE)

Application

EP 90123332 A 19901205

Priority

DE 3941329 A 19891214

Abstract (en)

[origin: EP0432626A2] At least one detector (M1, M2) is allocated in the setting mechanism to each go-signal light (F1, F2) of a light signal, which detector assumes a first switching state (-) when the signal light is illuminated and a second, active switching state (+) when the signal light is not illuminated; the second, active switching state of all detectors characterises the illumination of the stop-signal light (H). The illumination of a signal light (e.g. F1) is detected on the light signal via a light-current-controlled monitoring device (IG1) and transmitted with a pre-defined polarity to the setting mechanism via the feeding lines (LF1) of this signal light and the feeding lines (LH) of at least one de-activated signal light (H). When the stop-signal light (H) is activated, the monitoring voltage derived from the associated monitoring device (IG0) is applied to all detectors (M1, M2) via its own feeding lines and the feeding lines of all go-signal lights, out of phase with the DC voltages which can be injected via the monitoring devices (IG1, IG2) of the go-signal lights (F1, F2). When a go-signal light (e.g. F1) is activated, a voltage-controlled monitoring device (UG1) assigned to this signal light applies a monitoring voltage in phase with the DC voltage of the current-controlled monitoring device (IG0) of the stop-signal light via the feeding lines (LH, F2) to all detectors (M2) with the exception of its own detector (M1); an out-of-phase monitoring voltage derived from the light current is applied to this detector via changeover switches (K1.1, K1.2). A logical evaluation device evaluates the switching states of the detectors. The advantage of the circuit is that uniform switching modules (Mo1, Mo2) are used on the light signal for all go-signal lights without any individual connection with switching means of other signal lights. The circuit is intended for monitoring light signals in the railway network. <IMAGE>

IPC 1-7

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IPC 8 full level

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