

Title (en)

Modulation system for railway circuits.

Title (de)

Modulationssystem für Eisenbahnstromkreise.

Title (fr)

Système de modulation pour circuits de voie ferroviaires.

Publication

EP 0116293 A1 19840822 (FR)

Application

EP 84100273 A 19840112

Priority

FR 8300429 A 19830113

Abstract (en)

[origin: ES8504582A1] A modulation system for railway track circuits in which a modulated signal is applied to a section of track for the purpose of detecting the presence or absence of a train on the section. Such circuits are used to control signalling and they are vital to safe operation of a railway. At a transmitter end, the output (19) of a power amplifier (18) is connected to a section of track. The power amplifier (18) receives the modulated signal from a modulator (17) which is itself controlled by a pseudorandom binary sequence generator comprising a clock (11), a shift register (10), and a modulo 2 adding circuit (13, 14, 15). Equivalent circuitry is used at a receiver end to recognize the pseudorandom sequence in the absence of a train on a given section of track. The likelihood of interference from a train on that section generating an interference signal capable of being mistakenly recognized for the absence of a train can be reduced to an arbitrarily low value.

Abstract (fr)

Système de modulation pour circuits de voie ferroviaires comprenant chacun un émetteur (17) de signaux modulés en fréquence ou par impulsions, Chaque émetteur comporte un générateur (10, 11, 13, 14, 15) de séries binaires pseudo-aléatoires, le changement de fréquence ou de parité d'impulsion s'effectuant au rythme des changements de valeur binaire. Application : contrôle et sécurité ferroviaires.

IPC 1-7

B61L 1/18

IPC 8 full level

B61L 1/18 (2006.01)

CPC (source: EP US)

B61L 1/188 (2013.01 - EP US)

Citation (search report)

- FR 1007492 A 19520506 - UNION SWITCH & SIGNAL CO
- FR 2118946 A1 19720804 - ENIG ENGINEERING LTD
- DE 2700008 A1 19780706 - INST CERCETARE SI PROIECTARE T
- US 3958781 A 19760525 - WOODS DAVID H, et al

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DE FR GB IT NL

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