

Title (en)  
MODULATION SYSTEM FOR RAILWAY CIRCUITS

Publication  
**EP 0116293 B1 19880720 (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.

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