

Title (en)

Track circuit with cross-correlation.

Title (de)

Gleisstromkreis mit Kreuzkorrelation.

Title (fr)

Circuit de voie avec corrélation croisée.

Publication

EP 0470416 B1 19941012 (DE)

Application

EP 91112161 A 19910720

Priority

DE 4025194 A 19900809

Abstract (en)

[origin: EP0470416A2] A track circuit is disclosed, the receiver (E) of which carries out, for the purpose of track-release indication, a cross-correlation between a track voltage tapped off on the track (GL) and a reference voltage which is derived from the transmission signal of the track circuit transmitter (S) or generated separately. The maximum of the cross-correlation is sought by receiver (E) and compared with a predetermined threshold value. An embodiment with purely digital operation uses a track current source as transmitter which is controlled by a completely modulated transmission signal which is read out cyclically from a ROM. A microcomputer serves for calculating the cross-correlation function in the receiver (E) and for evaluating and tracking the maximum. The reference voltage is generated with the aid of a further ROM in the receiver (E) which is programmed in the same way as the transmission-side ROM. <IMAGE>

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B61L 1/18

IPC 8 full level

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CPC (source: EP)

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Cited by

EP1473209A3; CZ303498B6; EP1746008A3; EP1746009A3; EP1473209A2

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EP 0470416 A2 19920212; EP 0470416 A3 19930512; EP 0470416 B1 19941012; AT E112735 T1 19941015; DE 4025194 A1 19920213; DE 59103215 D1 19941117; ES 2065584 T3 19950216

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