

Title (en)  
Method and circuit for a safe feedback in railway applications

Title (de)  
Verfahren und Schaltungsanordnung zur Erzeugung einer eisenbahntechnisch sicheren Rückmeldung

Title (fr)  
Procédé et circuit pour créer un signal sûr de confirmation pour des applications ferroviaires

Publication  
**EP 1524167 A3 20090415 (DE)**

Application  
**EP 04022257 A 20040918**

Priority  
• EP 04022257 A 20040918  
• EP 03023063 A 20031014

Abstract (en)  
[origin: EP1524167A2] Method for producing an acknowledgement (2) of a command (1) comprises transmitting the command via a two-wire line using an alternating current source contained in a first railway unit (10), and producing the acknowledgement from the current flowing between the first railway unit and a second railway unit (20). An independent claim is also included for a switching arrangement for carrying out the above method. Preferred Features: The acknowledgement in the second step is connected by an alternating current relay (13) arranged in the first railway unit. The alternating current source is formed by a direct current source (11) and a multi-vibrator (12). The second railway unit has a current transformer (22).

IPC 8 full level  
**B61L 7/08** (2006.01)

CPC (source: EP)  
**B61L 7/08** (2013.01)

Citation (search report)

- [XY] DE 3527828 A1 19870326 - STANDARD ELEKTRIK LORENZ AG [DE]
- [XA] EP 0960797 A2 19991201 - SIEMENS SCHWEIZ AG [CH]
- [Y] DE 3140559 A1 19830428 - STANDARD ELEKTRIK LORENZ AG [DE]
- [Y] DE 1907057 A1 19700903 - STANDARD ELEKTRIK LORENZ AG
- [Y] DE 3715478 A1 19881117 - LICENTIA GMBH [DE]
- [Y] DE 3338490 A1 19850502 - STANDARD ELEKTRIK LORENZ AG [DE]
- [Y] US 4779071 A 19881018 - GUGLIELMO ALBERTO [IT]
- [A] DE 4132389 A1 19930401 - SIEMENS AG [DE]
- [A] EP 0404143 A1 19901227 - SEL ALCATEL AG [DE]
- [A] EP 0749884 A2 19961227 - ANSALDO TRASPORTI SPA [IT]

Cited by  
EP1953063A1; EP3643579A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL HR LT LV MK

DOCDB simple family (publication)  
**EP 1524167 A2 20050420; EP 1524167 A3 20090415; EP 1524167 B1 20101103**

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