

Title (en)

Measuring of the distance between two railway vehicles using the electromagnetic properties of the rail

Title (de)

Elektromagnetische Abstandsmessung zwischen Eisenbahnfahrzeugen

Title (fr)

Mesurer la distance entre deux véhicules ferroviaires utilisant les caractéristiques électromagnétiques de la voie

Publication

**EP 1593576 A3 20090415 (DE)**

Application

**EP 05004512 A 20050302**

Priority

DE 102004023154 A 20040507

Abstract (en)

[origin: EP1593576A2] The separation between two railway vehicles on the same line is detected by a rectangular pickup loop with a couple coil (5) jointly formed by two the two rails and respective axles. Together these operate as a strongly scattering transformer. The primary side of the transformer is formed by the couple coil. The secondary side is formed by a rectangular electrical conducting loop. A flow of current in the coil is associated with magnetic flux, with flux linkage to the loop formed by the axles. The coil is linked to a separation display instrument.

IPC 8 full level

**B61L 23/34** (2006.01); **B61L 17/00** (2006.01)

CPC (source: EP)

**B61L 17/00** (2013.01); **B61L 23/34** (2013.01)

Citation (search report)

- [XAY] DE 1813539 A1 19700219 - SIEMENS AG
- [Y] US 3484687 A 19691216 - BAILEY FRANCIS M, et al
- [Y] DE 19641521 C1 19980409 - SIEMENS AG [DE], et al
- [A] US 4735384 A 19880405 - ELLIOTT WILLARD [CA]
- [A] DE 4216406 A1 19931125 - LIESENKOETTER BERNHARD PROF DR [DE]
- [A] EP 0814008 A1 19971229 - NIPPON SIGNAL CO LTD [JP]

Cited by

WO2010060797A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

**EP 1593576 A2 20051109; EP 1593576 A3 20090415**; DE 102004023154 A1 20051215; DE 102004023154 B4 20060323

DOCDB simple family (application)

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