

Title (en)

MAGNETIC RAIL BRAKE DEVICE WITH ASYMMETRIC EXCITATION COILS AND/OR WITH MULTI-PART COILS

Title (de)

MAGNETSCHIENENBREMSVORRICHTUNG MIT ASYMMETRISCHER ERREGERSPULE UND/ODER MIT MEHRTEILIGER SPULE

Title (fr)

DISPOSITIF DE FREINAGE MAGNÉTIQUE SUR RAIL POURVU D'UNE BOBINE D'ÉLECTROAIMANT ASYMÉTRIQUE ET/OU D'UNE BOBINE EN PLUSIEURS PARTIES

Publication

EP 2139743 B1 20100915 (DE)

Application

EP 08716658 A 20080320

Priority

- EP 2008002249 W 20080320
- DE 102007014717 A 20070323

Abstract (en)

[origin: WO2008116597A2] The invention relates to a magnetic rail brake device of a railway vehicle, comprising at least one brake magnet (2) which is provided with a magnetic coil element (8) that supports the at least one magnetic coil (9), and a horseshoe-shaped magnetic core (6) having a yoke (28) and bearers (42a, 42b) protruding away therefrom. Pole shoes (16a, 16b) are embodied at the ends of the magnetic core which face a vehicle rail (1). The at least one magnetic coil (9) vertically engages the yoke (28) with the upper cover (30) and the lower cover (32) arranged between the bearers (42a, 42b). According to the invention, the cross-section of the at least one magnetic coil (9) in the upper cover (30) is smaller heightwise (h) and wider (b) than the cross-section in the under cover (32). The height (h) of the cross-section of the magnetic coil (9) is measured parallel and the width (b) of the cross-section of the magnetic coil (9) is measured transversally to a vertical central axis (38) of the brake magnet (2).

IPC 8 full level

B61H 7/08 (2006.01)

CPC (source: EP KR US)

B61H 7/04 (2013.01 - KR); **B61H 7/08** (2013.01 - EP KR US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008116597 A2 20081002; WO 2008116597 A3 20081218; AT E481284 T1 20101015; AT E548241 T1 20120315;
AU 2008232092 A1 20081002; CA 2681490 A1 20081002; CN 101641249 A 20100203; CN 101641249 B 20120725; CN 102358320 A 20120222;
CN 102358320 B 20140702; DE 102007014717 B3 20081127; DE 502008001331 D1 20101028; DK 2139743 T3 20110103;
DK 2192019 T3 20120521; EP 2139743 A2 20100106; EP 2139743 B1 20100915; EP 2192019 A1 20100602; EP 2192019 B1 20120307;
ES 2352825 T3 20110223; ES 2382686 T3 20120612; HK 1135659 A1 20100611; HR P20100512 T1 20101130; HR P20120384 T1 20120531;
JP 2010521373 A 20100624; JP 5306316 B2 20131002; KR 101440655 B1 20141103; KR 20090125261 A 20091204; PL 2139743 T3 20110331;
PL 2192019 T3 20120831; PT 2139743 E 20101012; PT 2192019 E 20120619; RU 2009139080 A 20110427; RU 2461481 C2 20120920;
SI 2139743 T1 20110131; SI 2192019 T1 20120731; TW 200909270 A 20090301; TW I400171 B 20130701; US 2010101898 A1 20100429;
US 8033365 B2 20111011

DOCDB simple family (application)

EP 2008002249 W 20080320; AT 08716658 T 20080320; AT 10001504 T 20080320; AU 2008232092 A 20080320; CA 2681490 A 20080320;
CN 200880009381 A 20080320; CN 201110261211 A 20080320; DE 102007014717 A 20070323; DE 502008001331 T 20080320;
DK 08716658 T 20080320; DK 10001504 T 20080320; EP 08716658 A 20080320; EP 10001504 A 20080320; ES 08716658 T 20080320;
ES 10001504 T 20080320; HK 10102445 A 20100309; HR P20100512 T 20100917; HR P20120384 T 20120508; JP 2010500120 A 20080320;
KR 20097020389 A 20080320; PL 08716658 T 20080320; PL 10001504 T 20080320; PT 08716658 T 20080320; PT 10001504 T 20080320;
RU 2009139080 A 20080320; SI 200830106 T 20080320; SI 200830633 T 20080320; TW 97110017 A 20080321; US 53197708 A 20080320