

Title (en)
SELF-DISCHARGING RAILWAY WAGON

Title (de)
SELBSTENTLADENDER EISENBAHNWAGGON

Title (fr)
WAGON DE CHEMIN DE FER À DÉCHARGEMENT AUTOMATIQUE

Publication
EP 2760721 A1 20140806 (EN)

Application
EP 12756564 A 20120822

Priority
• CZ 2011609 A 20110929
• IB 2012054243 W 20120822

Abstract (en)
[origin: WO2013046072A1] Self-discharging railway wagon The self-discharging railway wagon (1) is designed for the universal transport of bulk material in two hoppers (3) on a frame (5) with bogies (20), while the discharge gates (4) allow for continual and dosed unloading of the transported material either directly or onto a conveyor belt. The subject-matter of the invention lies in the shortening of the wagon (1) length (L) within the range of 12680 mm to 12950 mm while maintaining an optimal loading volume of $48 \text{ m}^3 \pm 10^\circ$, while achieving an optimal position of the center of gravity above the rails (25) and discharge angle $\alpha = 50^\circ \pm$ identical at the side walls (16) and front walls (17) of the hopper (3) for problem-free unloading of various types of bulk material, especially sand and gravel, as well as in the design of lightened construction with a low actual wagon (1) weight. According to the invention, the wagon (1) is fitted with shortened headings (6) with recessed plates (13) of the chambers of the headings (6) with a central cavity (26) for automatic coupling, bogies (20) without headstocks and with integrated braking units (36) for automatic coupling, lightened reinforcing saddles (19) and improved control mechanism (18) for controlling the discharge gates (4). The parameters of the wagon (1) allow for a better ratio of loading volume / net weight for trains, which leads to an improved economy of railway freight transport.

IPC 8 full level
B61D 7/00 (2006.01)

CPC (source: EP)
B61D 7/00 (2013.01)

Citation (search report)
See references of WO 2013046072A1

Cited by
CN107215345A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2013046072 A1 20130404; CZ 2011609 A3 20130410; CZ 307515 B6 20181107; EP 2760721 A1 20140806; EP 2760721 B1 20190206; HR P20190810 T1 20190809; PL 2760721 T3 20190830; TR 201906534 T4 20190521

DOCDB simple family (application)
IB 2012054243 W 20120822; CZ 2011609 A 20110929; EP 12756564 A 20120822; HR P20190810 T 20190430; PL 12756564 T 20120822; TR 201906534 T 20120822