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(54) A railway wagon with a rotatable loading floor

(57) A railway wagon comprising a body (10) having end portions (11, 12) mounted on bogies (14) and a middle portion (13) recessed with respect to the end portions (11, 12) along recess walls (15, 16), a loading floor (21) horizontally rotatable above the body middle portion (13) between a transport configuration in which the longitudinal axis (Lf) of the loading floor (21) overlaps the longitudinal axis (Lb) of the body (10) and the shorter edges (22, 23) of the loading floor (21) are directed towards the recess walls (15, 16), and a loading configuration in which the longitudinal axis (Lf) of the loading floor (21) is inclined with respect to the longitudinal axis (Lb) of the body (10) and the shorter edges (22, 23) of the loading floor (21) are directed towards the platform surface (51), wherein the shorter edges (22, 23) of the loading floor (21) comprise holders (24, 25) configured to support the loading floor (21) on the body (10) above the middle portion (13) in the transport configuration and to slide on guides (17, 18) formed along the recess walls (15, 16) of the body (10) during rotation between the transport configuration and the loading configuration, rollers (19) configured to support the loading floor (21) and to slide on a platform surface (51) during rotation between the transport configuration and the loading configuration.

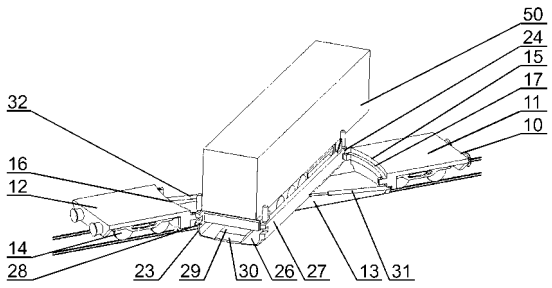


Fig. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 10 46 1528

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 0 208 228 A2 (WALDA FEDDE [NL]; WALDA NANNE MARCEL [NL]; WALDA BENNO FEDDE [NL]) 14 January 1987 (1987-01-14) * figures 5, 6 *	1	INV. B61D3/18
A	DE 100 14 951 A1 (RAUM WILFRIED [DE]; RAUM THOMAS [DE]) 4 January 2001 (2001-01-04) * figure 1 *	1	
A	US 3 884 158 A (RUMELL JAMES A) 20 May 1975 (1975-05-20) * figure 3 *	1	
A	DE 20 2009 008233 U1 (GERLACH JENS [DE]; GERLACH LUTZ [DE]; GERLACH MANFRED [DE]) 20 August 2009 (2009-08-20) * figure 1 *	1	
A	WO 81/02142 A1 (BEHRENS R) 6 August 1981 (1981-08-06) * figure 10 *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			B61D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	21 November 2012	Lorandi, Lorenzo

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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21-11-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0208228 A2	14-01-1987	AT 43309 T	15-06-1989
		DE 3663499 D1	29-06-1989
		EP 0208228 A2	14-01-1987
		ES 2001501 A6	01-06-1988
		HU 199738 B	28-03-1990
		NL 8501911 A	02-02-1987
		US 4776735 A	11-10-1988
DE 10014951 A1	04-01-2001	NONE	
US 3884158 A	20-05-1975	CA 1036867 A1	22-08-1978
		GB 1486020 A	14-09-1977
		US 3884158 A	20-05-1975
DE 202009008233 U1	20-08-2009	DE 202009008233 U1	20-08-2009
		EP 2228278 A1	15-09-2010
WO 8102142 A1	06-08-1981	EP 0064053 A1	10-11-1982
		WO 8102142 A1	06-08-1981

EPO FORM P0459

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