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(54) Title: COVER SYSTEM FOR OPEN TOP RAIL CARS

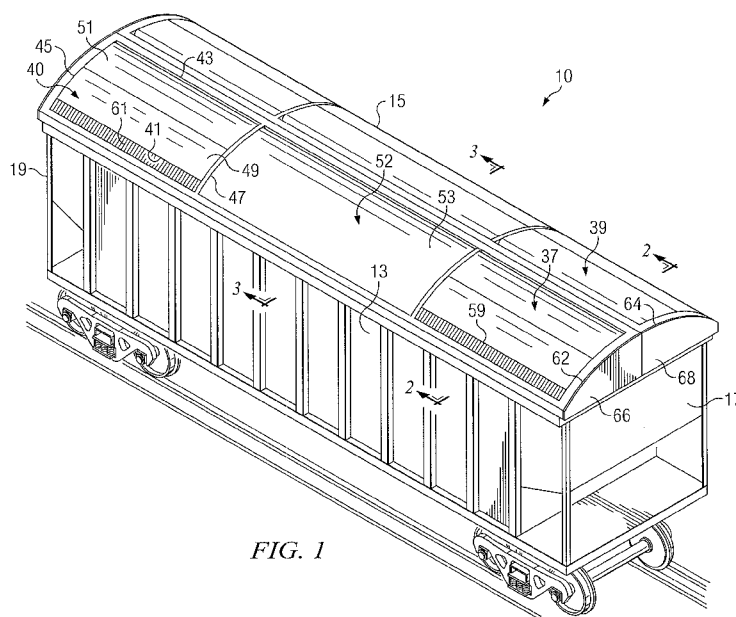


FIG. 1

(57) Abstract: The open top of a rail car is covered by at least one pair of main doors in the form of opposing hinged A-frame sections which are pivotable between a closed, transport position and an open loading position which exposes the rail car interior for loading. A discharge door is pivotally hinged within the respective door opening so that it opens under the influence of gravity in a rotary dumping operation. The discharge doors, together with the A-frame sections, form a door-within-a-door operating configuration.

INTERNATIONAL SEARCH REPORT

PCT/US 12/23918

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B61D 39/00 (2012.01)

USPC - 105/377.05

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 105/238.1, 355, 377.01, 377.02, 377.03, 377.04, 377.06, 377.07, 377.08, 377.09 (text - search - see terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST(USPT,PGPB,EPBA,JPAB); Google Scholar; Google Patents

Search Terms: railcar, rail, car, cover, door, top, pivot, hinge, slide, rotate, A-frame, dump, gravity, open, brushes, spring, close,... etc.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2008/0236439 A1 (Low et al.) 02 October 2008 (02.10.2008), fig 1-4 and 16, para [0002], [0004], [0008], [0064]-[0066] and [0078]-[0084]	1-20
Y	US 5,498,066 A (Cuthbertson et al.) 12 March 1996 (12.03.1996), fig 2 and 4; col 3, ln 66-67 to col 4, ln 1-56	1-3, 10-11 and 16-20
Y	US 2009/0235841 A1 (Baranowski et al.) 24 September 2009 (24.09.2009), fig 1 and 2	1-3
Y	US 3,741,128 A (Flowers) 26 June 1973 (26.06.1973), fig 1 and 3, col 3, ln 45-53	4-20
Y	US 4,613,174 A (Berg et al.) 23 September 1986 (23.09.1986), fig 6, col 4, ln 13-35	4-20
Y	US 6,067,912 A (Miller) 30 May 2000 (30.05.2000), fig 10, col 6, ln 49-58	6-8 and 15-20
Y	US 2006/0225359 A1 (Tuma) 12 October 2006 (12.10.2006), para [0027]	12 and 20
A	US 1,847,132 A (MORROW) 01 March 1932 (01.03.1932), entire document especially Figs	1-20
A	US 2,408,132 A (Weeks) 24 September 1946 (24.09.1946), fig 1 and 4, col 1, ln 29 to col 2, ln 52	1-20

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