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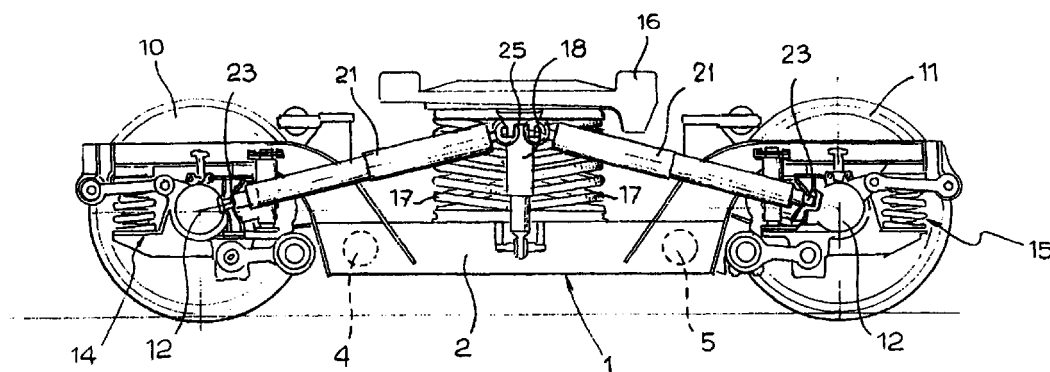
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(54) **Railway vehicle bogie**

(57) A railway vehicle bogie including a frame (1), two axles (6, 7) connected to the frame (1) through respective journal boxes (12, 13), secondary suspension springs (17) interposed between the frame and a load bearing transom (16) intended to be fixed to vehicle body, and hunting absorbers arranged at the opposite sides of the bogie. The hunting absorbers comprise, at

each bogie side, a pair of juxtaposed telescopic dampers (21, 22) placed between the load bearing transom (16) and the journal boxes (12, 13) of the two axles (6, 7). The hunting dampers (21, 22) are inclined both in the vertical plane and in the horizontal plane, and may also act as vertical and/or lateral shock absorbers.

Fig. 1



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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	DE 41 22 741 A (WAGGON UNION GMBH) 14 January 1993 * column 4, line 29 - column 6, line 3; figures 1,2 *	1	B61F5/12 B61F5/24
A	US 5 107 773 A (DALEY RICHARD A ET AL) 28 April 1992 * column 2, line 66 - column 4, line 38; figures 1,2 *	1	
A	DE 14 05 596 A (M. F. A. JULIEN AND PAULSTRA SA) 24 October 1968 * page 4, line 4 - page 8, paragraph 3; figures 1-3 *	1	
A	EP 0 399 345 A (RAUTARUUKKI OY) 28 November 1990 * column 4, line 18 - column 6, line 36; figures 1-3 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B61F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 February 1999	Examiner Chlosta, P
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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09-02-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 4122741 A	14-01-1993	AT 125501 T	15-08-1995
		AU 652061 B	11-08-1994
		AU 1888492 A	11-02-1993
		CZ 280346 B	13-12-1995
		DE 59203035 D	31-08-1995
		WO 9301076 A	21-01-1993
		EP 0547188 A	23-06-1993
		FI 931030 A	09-03-1993
		HU 66343 A	28-11-1994
		PL 298236 A	29-11-1993
		PT 100674 A	31-05-1994
		SK 12393 A	07-07-1993
		US 5351624 A	04-10-1994
		ZA 9204653 A	03-05-1993
US 5107773 A	28-04-1992	NONE	
DE 1405596 A	24-10-1968	CH 370818 A	
		DE 1302530 B	
		FR 1267820 A	29-11-1961
		GB 984820 A	
		NL 264966 A	
		US 3121402 A	18-02-1964
EP 0399345 A	28-11-1990	FI 82424 B	30-11-1990
		DE 69002686 T	25-11-1993
		US 5123358 A	23-06-1992