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### (54) Running gear assembly with minimum play for a rail vehicle with radial adjustment of wheel pairs or wheel sets

(57) The invention relates to a running gear assembly (1) for a rail vehicle comprising a plurality of two-wheeled running gears (2,3), at least one of which is radially steerable using steering levers (6) mutually connecting the running gears (2,3), wherein at least the one steerable running gear (2,3) comprises a ring assembly system formed by at least a first and a second ring, the first of which is connected to a sub-frame forming part of the relevant running gear (2,3) and at least the second ring is connected to one of the steering levers connecting the running gear (2,3) to other running gears (2,3) and that the running gear (2,3) comprises coupling means for mutually coupling the rings and steering

levers such that the wheels forming part of the running gear (2,3) are directed substantially radially.

There is a completely free choice of coupling of the four elements, first, second lever, sub-frame and wheel pair/wheel set, to the three concentric moving rings or groups of rings, the sole proviso being that the forced radial adjustment of the wheel pair/wheel set is achieved.

As a result of these steps the use of hinges is eliminated as far as possible so that the danger of play occurring is as small as possible.

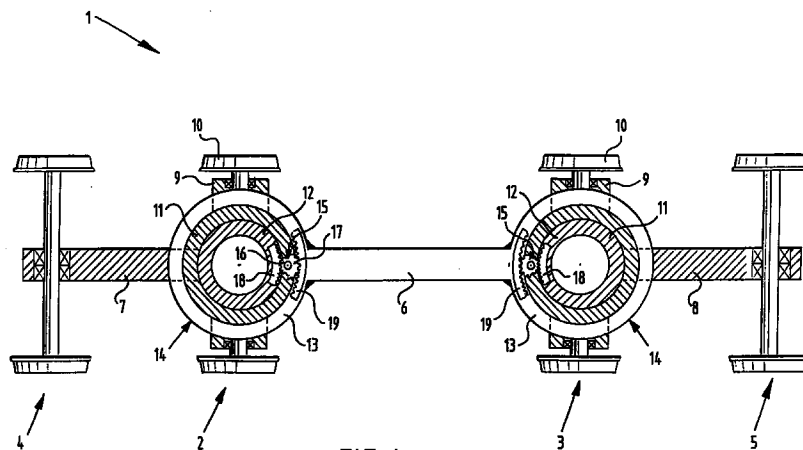


FIG. 1

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# EUROPEAN SEARCH REPORT

Application Number  
EP 96 20 0425

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	FR-A-2 562 859 (ANF IND) 18 October 1985 * page 3, line 19 - page 5, line 35; figures 1-4 *	1	B61F5/46
A	WO-A-85 05602 (OMS OFF MEC STANGA SPA ;VIGLIANI UMBERTO (IT)) 19 December 1985 * page 6, line 10 - page 9, line 21; figures 1,5,6 *	1	
A	US-A-3 230 899 (T. A. JOHNSON) 25 January 1966 * column 3, line 14 - column 4, line 10; figures 6-11 *	1	
A	CH-A-399 522 (SCHWEIZERISCHE WAGGON- UND AUFZÜGEFABRIK AG) 31 March 1966 * page 1, line 73 - page 2, line 41; figure 1 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B61F B61D
Place of search		Date of completion of the search	Examiner
THE HAGUE		29 May 1996	Chlost, P
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>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 ..... &amp; : member of the same patent family, corresponding document</p>			

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