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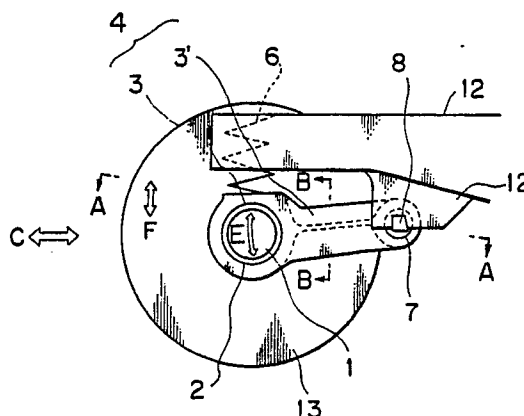
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54 **Axle box suspension.**

57 There is provided an axle box suspension having an axle spring according to the present invention, wherein an axle box body is formed by providing an axle anchor rod at one end of the axle box, and the axle anchor rod is shaft-coupled to a truck frame through a resilient element, so that longitudinal, lateral and vertical swivel movement between the axle and the truck frame can be allowed by deforming the resilient element and the axle anchor rod without rattle, thereby the running stability of the vehicle is greatly improved. Further, since the axle box suspension does not have slides and gaps, a wear and a deterioration due to years of driving are eliminated, whereby replacement of the components will be obviated and maintenance thereof will be much more facilitated. Moreover, excellent advantages such as simplified structure, space-saving of the whole axle box suspension, reduction in its weight are provided.

FIG. 1



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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.5) |
| X  | GB-A-2193941 (SIG SCHWEIZERISCHE INDUSTRIE-GESELLSCHAFT)<br>* page 2, line 95 - page 3, line 41; figures 3-6<br>* | 1   | B61F5/32<br>B61F5/30                          |
| A  | ---   | 2, 4  |   |
| X  | GB-A-780783 (MASCHINENFABRIK AUGSBURG-NUERNBERG AG)<br>* page 1, line 87 - page 2, line 67; figures 1, 2 *        | 1   |   |
| A  | ---   | 2, 4  |   |
| A  | US-A-4356775 (H. N. PATON ET AL.)<br>* column 5, line 4 - column 5, line 45; figures 1-3 *                        | 1, 2, 4   |   |
| A  | ---   | 1   |   |
| X  | DE-B-1138088 (ATLAS - WERKE AG)<br>* column 2, line 35 - column 4, line 7; figures 1-4 *                          | 5   | TECHNICAL FIELDS SEARCHED (Int. Cl.5)         |
| A  | ---   | 6   | B61F  |
| A  | DE-B-1150403 (KRAUSS - MAFFEI AG)<br>* column 3, line 47 - column 5, line 10; figures 1, 2 *                      | 5   |   |
|  | -----   |   |   |
| The present search report has been drawn up for all claims   |   |   |   |
| Place of search<br>THE HAGUE   |   | Date of completion of the search<br>15 MARCH 1990 | Examiner<br>CHLOSTA P.                        |
| <b>CATEGORY OF CITED DOCUMENTS</b><br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>.....<br>& : member of the same patent family, corresponding document |   |   |   |