

Title (en)  
Car body structure

Title (de)  
Wagenkasten

Title (fr)  
Structure de caisse

Publication  
**EP 2204309 A1 20100707 (EN)**

Application  
**EP 09251772 A 20090710**

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• JP 2009000346 A 20090105  
• JP 2009086051 A 20090331

Abstract (en)  
The invention provides a car body structure capable of facilitating the process of laying wires and pipes to penetrate through a body bolster, solving the problem of the prior art car body structure such as the increase of the number of components and manufacturing costs, and ensuring the rigidity and strength of the body bolster efficiently. In an underframe 1, wires and pipes 11 are passed through the inner space of a penetration portion 10 of a centre sill penetrated through a body bolster 5. Further, a bulkhead 13 extending along a diagonal line is formed in the interior of the penetration portion 10. According to this arrangement, there is no need to provide a penetrating pipe dedicated to passing through wires and pipes adopted in prior art body bolsters 5, and the load applied from an antirolling device can be borne by the bulkhead 13, so that the process of laying wires and pipes through the body bolster can be facilitated, the problems of the prior art car body structure caused for example by the increase of the number of components and manufacturing costs can be solved, and the rigidity and strength of the body bolster can be efficiently ensured.

IPC 8 full level  
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**B61D 17/10** (2013.01 - KR); **B61F 1/02** (2013.01 - EP); **B61F 1/08** (2013.01 - KR); **B61F 1/12** (2013.01 - EP)

Citation (applicant)  
• JP S5756929 U 19820403  
• JP 3624527 B2 20050302  
• ALUMINUM ALLOY AND LIGHTWEIGHT CAR, 1990, pages 308

Citation (search report)  
• [A] US 2504113 A 19500418 - DEAN WALTER B  
• [A] US 2132232 A 19381004 - DURYEA OTHO C

Cited by  
CN108657202A; RU199335U1; GB2567931A; GB2567931B; RU184141U1; JP2019131090A; EP2722246A4; EP3431357A1; WO2018233904A1; EP2722246B1; EP3431357B1

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**EP 09251772 A 20090710**; CN 200910142597 A 20090703; JP 2009086051 A 20090331; KR 20090069802 A 20090730