

Title (en)
Car body structure for a railway vehicle

Title (de)
Wagenkasten eines Schienenfahrzeuges

Title (fr)
Structure de caisse de véhicule ferroviaire

Publication
EP 2110291 A2 20091021 (EN)

Application
EP 09250434 A 20090219

Priority
JP 2008104668 A 20080414

Abstract (en)
The invention provides a car body structure capable of facilitating the laying operation of wires and pipes passing through a body bolster, preventing the increase of components and complexity of underfloor structure, and reducing the cost of manufacturing the car body without deteriorating the rigidity and strength of the body bolster. Center sills 7, 7 are passed through a body bolster 5 in an underframe 1, the intersection of center sills 7, 7 and the body bolster referred to as a penetration portion 10, wherein the inner space of the penetration portion 10 is used to arrange wires and pipes (the paths thereof shown by reference number 11). The interior of the penetration portion 10 is a rectangular hollow space capable of allowing a sufficient amount of wires and pipes to be passed therethrough. Since there is no need to provide to the body bolster 5 conventional penetration pipes dedicated for arranging wires and pipes, and thus no voids are formed in the body bolster 5, the deterioration of rigidity and strength of the body bolster 5 caused by such segmentalization of the body bolster 5 can be prevented and the manufacturing cost can be cut down without increasing components such as reinforcement members.

IPC 8 full level
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CPC (source: EP KR)
B61D 17/04 (2013.01 - KR); **B61D 17/041** (2013.01 - EP); **B61D 17/10** (2013.01 - KR); **B61F 1/12** (2013.01 - EP); **B61F 5/04** (2013.01 - KR)

Citation (applicant)
• JP S5756929 U 19820403
• JP 3624527 B2 20050302
• "Aluminum alloy and lightweight car", 1990, JAPAN ALUMINUM ASSOCIATION, pages: 308

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