

## Title (en)

Rail vehicle, manufacturing method thereof, and hollow shape member used for the same

## Title (de)

Herstellungsverfahren für ein Schienenfahrzeug, und dazu verwendete Hohlkörperelemente

## Title (fr)

Procédé de fabrication d'un véhicule ferroviaire, et éléments creux utilisés pour le procédé.

## Publication

**EP 1839989 A3 20081217 (EN)**

## Application

**EP 06253529 A 20060705**

## Priority

JP 2006086987 A 20060328

## Abstract (en)

[origin: EP1839989A2] A rail vehicle capable of preventing reduction in strength and noise occurrence in a connecting portion of a low roof construction body to a roof construction or a side construction body, and facilitating mounting of the low roof construction body to the roof construction body or the side construction body, its manufacturing method and a hollow shape member used for the same are provided. In joining a hollow shape member (120) constructing a side construction body and a hollow shape member (210) constructing a low roof construction body (20), an uppermost portion above a spot to be a joint portion of the hollow shape member (120) to the low roof construction body (20) is cut, and a first protruded rib (124) and a second protruded rib (125) are left at an upper end portion (128) of the hollow shape member (120) toward the low roof construction body (20). Next, the low roof construction body (20) is lowered from above the side construction body (12), the first engaging rib (214) and the second engaging rib (215) of the low roof construction body (20) are mounted on the first protruded rib (124) and the second protruded rib (125), and butted portions (220 and 221) are welded from a vehicle outer side or a vehicle inner side. Occurrence of a level difference of the welding spot which becomes a noise generation source can be prevented, and manufacture of the vehicle body can be facilitated.

## IPC 8 full level

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## Citation (search report)

- [X] DE 9320494 U1 19940922 - VAW VER ALUMINIUM WERKE AG [DE]
- [X] EP 0672567 A1 19950920 - HITACHI LTD [JP]
- [X] EP 0354436 A1 19900214 - CIMT COMP INT MAT TRANSPORT [FR]
- [X] EP 0369134 A1 19900523 - MESSERSCHMITT BOELKOW BLOHM [DE]
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- [A] EP 0405889 A2 19910102 - HITACHI LTD [JP]
- [A] EP 0739800 A1 19961030 - INST SCHIENENFAHRZEUGE [DE]
- [A] DE 9305321 U1 19930617
- [A] EP 0345962 A2 19891213 - HITACHI LTD [JP]

## Cited by

CN103370254A; WO2012110045A1; EP3929054A4; DE102020111834A1; WO2021219724A1; EP2675689B1; EP2675689B2

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