

Title (en)

Method for producing plural panel automotive members

Title (de)

Herstellungsverfahren von Kraftfahrzeug-Teilen mit mehreren Platten

Title (fr)

Méthode de fabrication de parties à panneaux multiples pour l'automobile

Publication

EP 1794338 A2 20070613 (EN)

Application

EP 05791238 A 20050825

Priority

- US 2005030194 W 20050825
- US 92670404 A 20040827

Abstract (en)

[origin: US2006042727A1] Disclosed is a method for producing aluminum vehicular structural parts or members such as from molten aluminum alloy using a continuous caster to cast the alloy into a slab. The method comprises providing a molten aluminum alloy consisting essentially of 2.7 to 3.6 wt. % Mg, 0.1 to 0.4 wt. % Mn, 0.02 to 0.2 wt. % Si, 0.05 to 0.30 wt. % Fe, 0.1 wt. % max. Cu, 0.25 wt. % max. Cr, 0.2 wt. % max. Zn, 0.15 wt. % max. Ti, the remainder aluminum, incidental elements and impurities and providing a continuous caster such as a belt caster, block caster or roll caster for continuously casting the molten aluminum alloy. The molten aluminum alloy is cast into a slab which is rolled into a sheet product and then annealed. The sheet has an improved distribution of intermetallic particles (Al-Fe, Al-Fe-Mn or Mg₂Si) and improved formability. Thereafter, the sheet product is formed into the vehicular structural part or member with sufficient strength and formability required by automotive industry.

IPC 8 full level

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