

Title (en)

Aluminium alloy for structural shaped elements of vehicles and process for manufacturing said elements.

Title (de)

Aluminiumlegierung für profilierte Karosserieelemente von Fahrzeugen und Verfahren zu deren Herstellung.

Title (fr)

Alliage à base d'aluminium pour éléments structuraux profilés de véhicules et procédé pour la fabrication de ces éléments.

Publication

EP 0132650 A1 19850213 (EN)

Application

EP 84107852 A 19840705

Priority

IT 2211983 A 19830719

Abstract (en)

Aluminium alloy for shaped elements of vehicles and the like, which comprises from 0.25 to 0.35% of Si, from 0.20 to 0.30% of Fe; from 0.85 to 1.1% of Mg, from 0.10 to 0.25% of Cu; other elements, as impurities, each below 0.1%, in the aggregate below 0.2%; the balance to 100% being Al. A process for manufacturing shaped elements of vehicles starting from a cast body of said alloy, which is homogenized at 540-580 DEG C and then worked to obtain sheets (or the like), which are then subjected to a solution heat-treatment at 525-535 DEG C followed by hardening and natural ageing to state T4; said sheets are then formed by means of dies to shaped elements, which, at last, are subjected to artificial ageing at 180-220 DEG C.

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C22C 21/08; **C22F 1/04**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] FR 2264885 A1 19751017 - ALUSUISSE [CH]
- [A] DE 1294031 B 19690430 - ALUMINUM CO OF AMERICA
- [A] FR 2351183 A1 19771209 - SUMITOMO LIGHT METAL IND [JP]
- [A] FR 2351182 A1 19771209 - SUMITOMO LIGHT METAL IND [JP]
- [A] FR 2158729 A5 19730615 - CEGEDUR
- [A] US 4043840 A 19770823 - SPERRY PHILIP R, et al
- [A] DE 1608159 A1 19730816 - HONSEL WERKE AG

Cited by

US5204043A; US5573606A; US5085097A; EP0245464A4; DE4419218C2; DE19754170A1; EP0548007A1; CH685707A5

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