

Title (en)

Vehicle frame components exhibiting enhanced energy absorption, an alloy and a method for their manufacture

Title (de)

Fahrzeugrahmenbauteile mit verbesserter Energieabsorptionsfähigkeit, Verfahren zu ihrer Herstellung und eine Legierung

Title (fr)

Pièces pour la châssis d'un véhicule ayant un absorption d'énergie amélioré, procédé pour leur fabrication et un alliage

Publication

EP 0805219 A1 19971105 (EN)

Application

EP 96107023 A 19960503

Priority

EP 96107023 A 19960503

Abstract (en)

An improved elongate aluminum alloy product, and a method of producing such a product, ideally suited for use as a component in a vehicle frame or subassembly, i.e., body-in-white. The alloy comprises essentially 0.45 to 0.7% magnesium, 0.35 to 0.6% silicon, 0.1 to 0.35% vanadium, and 0.1 - 0.4% iron, preferably 0.15 to 0.3%, the balance substantially aluminum and incidental elements and impurities. <IMAGE>

IPC 1-7

C22C 21/08; C22C 21/02; C22F 1/05; C22F 1/043

IPC 8 full level

C22C 21/02 (2006.01); **C22C 21/08** (2006.01); **C22F 1/043** (2006.01); **C22F 1/05** (2006.01)

CPC (source: EP)

C22C 21/02 (2013.01); **C22C 21/08** (2013.01); **C22F 1/043** (2013.01); **C22F 1/05** (2013.01)

Citation (search report)

- [DA] US 4525326 A 19850625 - SCHWELLINGER PIUS [DE], et al
- [A] US 3938991 A 19760217 - SPERRY PHILIP R, et al
- [DA] US 4618163 A 19861021 - HASLER FRANZ [DE], et al
- [E] US 5527404 A 19960618 - WARREN ALLISON S [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 190 (C - 1048) 14 April 1993 (1993-04-14)
- [A] W.HUFNAGEL: "ALUMINIUM-TASCHENBUCH", 1983, ALUMINIUM VERLAG, DUSSELDORF, DE, XP002010927

Cited by

EP1380661A1; EP1433866A3; CH693673A5; CN108893661A; EP0997547A1; EP3831969A1; WO2004090369A1; WO0052216A1; EP1785499A2; DE102008008326A1; EP2088216A1

Designated contracting state (EPC)

DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0805219 A1 19971105; EP 0805219 B1 20040728; DE 69633002 D1 20040902; DE 69633002 T2 20050721

DOCDB simple family (application)

EP 96107023 A 19960503; DE 69633002 T 19960503