

Title (en)

USE OF ALUMINIUM-SILICON-MAGNESIUM ALLOY FOR MANUFACTURING OF MOTOR VEHICLE BODY PARTS AND METHOD FOR MANUFACTURING THE SAME.

Title (de)

VERWENDUNG EINER ALUMINIUM-SILIZIUM-MAGNESIUM-LEGIERUNG ZUR HERSTELLUNG VON FAHRZEUGKARROSSERIETEILEN UND VERFAHREN DIESER HERSTELLUNG.

Title (fr)

UTILISATION D'ALLIAGE ALUMINIUM-SILICIUM-MAGNESIUM POUR FABRICATION DE PIECES DE CARROSSERIE AUTOMOBILE ET PROCEDE DE FABRICATION DE TELLES PIECES.

Publication

EP 0896637 B1 20000524 (FR)

Application

EP 97921897 A 19970428

Priority

- FR 9700755 W 19970428
- FR 9605595 A 19960429

Abstract (en)

[origin: WO9741272A1] The invention discloses an aluminium alloy, to be used particularly in the manufacture of the external parts of a motor vehicle body, of the following composition (wt.%): Si: 0.5-0.8, Mg 0.45-0.65, Cu: 0.55-0.75, Mn and/or Cr: 0.1-0.3 with $1.6 < \text{Si} + \text{Mg} + \text{Cu} < 2.0$. The composition of the invention provides high mechanical strength following an easy solution-treatment step and paint curing at 150 to 170 DEG C.

IPC 1-7

C22C 21/16; C22C 21/02; C22F 1/057; C22F 1/043; B62D 29/00

IPC 8 full level

C22C 21/02 (2006.01); **C22C 21/14** (2006.01); **C22C 21/16** (2006.01); **C22F 1/043** (2006.01); **C22F 1/057** (2006.01)

CPC (source: EP)

C22C 21/02 (2013.01); **C22C 21/14** (2013.01); **C22C 21/16** (2013.01); **C22F 1/043** (2013.01); **C22F 1/057** (2013.01)

Citation (examination)

- JP H04247842 A 19920903 - SKY ALUMINIUM
- US 4784921 A 19881115 - HYLAND M E [US], et al
- JP H06289852 A 19941018 - YAMAHA CORP
- GUPTA ET AL: 'THE PROPERTIES AND CHARACTERISTICS OF TWO NEW AUTOMOTIVE ALUMINIUM CLOSURE PANEL MATERIALS', SAE, CONGRES DU 26-29 FEVRIER 1996, DETROIT, MICHIGAN, USA.

Designated contracting state (EPC)

CH DE ES GB IT LI

DOCDB simple family (publication)

WO 9741272 A1 19971106; DE 69702133 D1 20000629; DE 69702133 T2 20001109; DE 69702133 T3 20060420; EP 0896637 A1 19990217; EP 0896637 B1 20000524; EP 0896637 B2 20050727; ES 2146467 T3 20000801; ES 2146467 T5 20060301; FR 2748035 A1 19971031; FR 2748035 B1 19980703

DOCDB simple family (application)

FR 9700755 W 19970428; DE 69702133 T 19970428; EP 97921897 A 19970428; ES 97921897 T 19970428; FR 9605595 A 19960429